

PROPOSED SELF-STORAGE FACILITY
100 MILFORD ROAD

SOUTH GRAFTON, MASSACHUSETTS

FEBRUARY 4, 2015

PREPARED FOR:

HILLTOP SELF-STORAGE OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

PREPARED BY:

ANDREWS SURVEY & ENGINEERING, INC.
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LAND SURVEYING:

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WAIVERS

EXCEPT FOR THE FOLLOWING WAIVERS, THIS SITE PLAN HAS BEEN DESIGNED TO COMPLY WITH THE PERFORMANCE STANDARDS SET FORTH IN SECTION 4.1 OF THE ZONING BY-LAW OF THE TOWN OF GRAFTON.

SELF-STORAGE

SECTION 8.2 - TRAFFIC STUDY - THE APPLICANT REQUESTS A WAIVER FROM THIS SECTION OF THE ZONING BYLAWS. A DETAILED NARRATIVE OF ANTICIPATED TRAFFIC GENERATION FOR THE PROPOSED SELF-STORAGE FACILITY ARE ENCLOSED WITHIN THE APPLICATION PACKAGE. THE DATA PRESENTED IS FROM AN EXISTING COMPARABLE SELF-STORAGE FACILITY.

ELECTRIC SOLAR GENERATION

SECTION 1.3.3.3(E) - A STORMWATER MANAGEMENT HYDROLOGICAL STUDY PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS COVERING THE SUBDIVISION OF LAND: GRAFTON, MASSACHUSETTS (SECTIONS 3.3.3.19 AND 4.7.8)

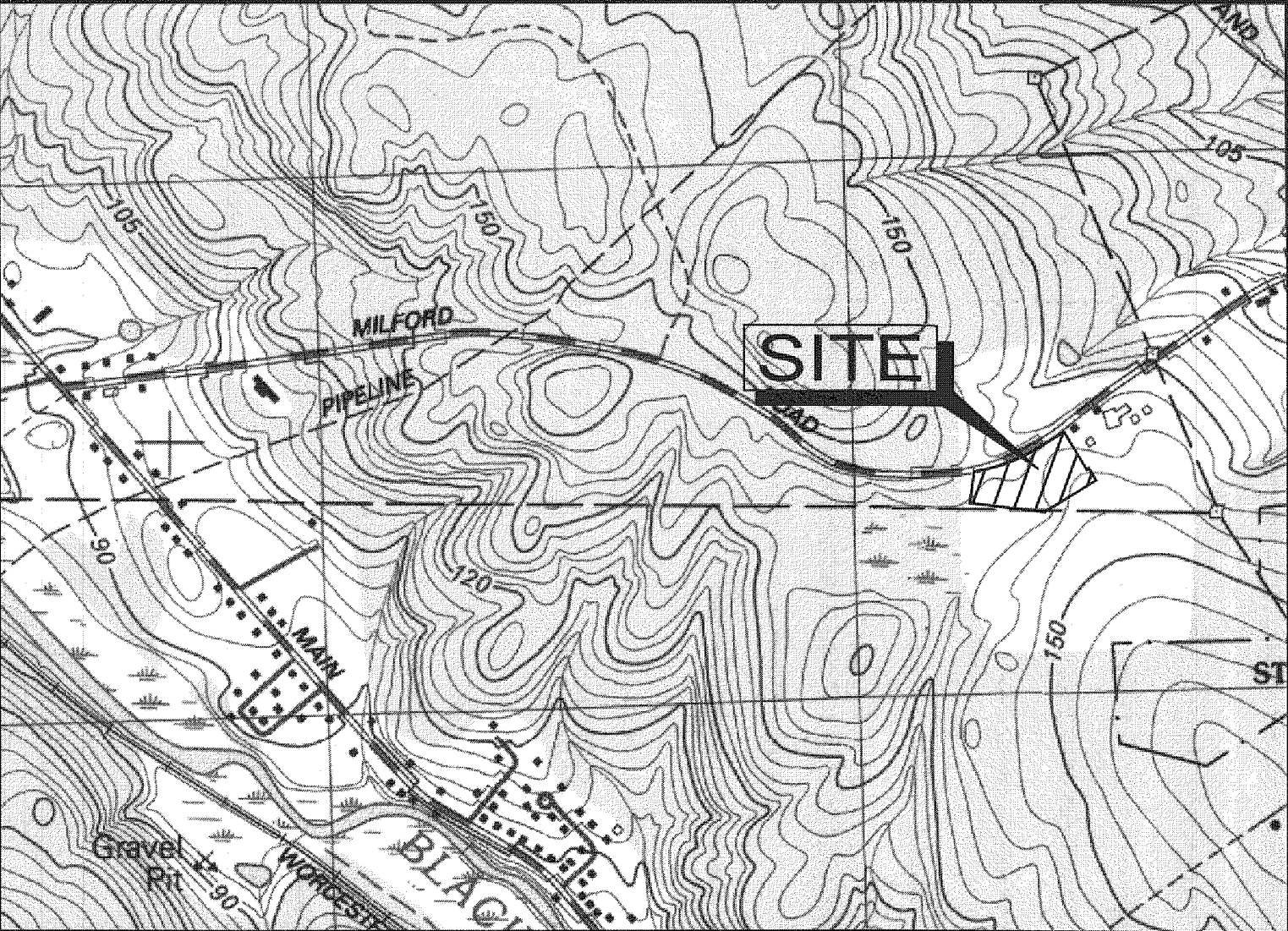
THE APPLICANT REQUESTS A WAIVER FROM THIS SECTION OF THE ZONING BYLAWS SINCE A STORMWATER MANAGEMENT HYDROLOGICAL STUDY WAS PREPARED AND SUBMITTED FOR THE PROPOSED SELF-STORAGE SITE AND NO ADDITIONAL RUNOFF WILL BE CREATED FROM THE PROPOSED ROOF-MOUNTED SOLAR PHOTOVOLTAIC SYSTEM.

SECTION 1.3.3.3(F) - A REPORT, IF APPLICABLE, SHOWING CALCULATIONS OF THE VOLUME OF EARTH MATERIAL TO BE REMOVED FROM OR DELIVERED TO THE SITE, INCLUDING A DESCRIPTION OF SUCH REMOVAL OR FILL ACTIVITY. DEPENDING UPON THE VOLUME OF MATERIAL TO BE REMOVED OR FILLED, THE PLANNING BOARD MAY REQUIRE THE APPLICANT TO SUBMIT ADDITIONAL INFORMATION (IF NOT SUBMITTED IN THE REPORT) REGARDING, BUT NOT LIMITED TO, THE FOLLOWING: THE HOURS OF FILL/REMOVAL ACTIVITY; PROPOSED ROUTE(S) OF TRANSPORTING MATERIALS TO AND FROM THE SITE; AND MEASURES FOR DUST AND EROSION CONTROL (BOTH ON-AND OFF-SITE) FOR THE PROPOSED ACTIVITY.

THE APPLICANT REQUESTS A WAIVER FROM THIS SECTION OF THE ZONING BYLAWS SINCE EARTHWORK VOLUMES WERE PROVIDED FOR THE PROPOSED SELF-STORAGE SITE AND NO ADDITIONAL EARTHWORK WILL OCCUR FROM THE PROPOSED ROOF-MOUNTED SOLAR PHOTOVOLTAIC SYSTEM.

SECTION 8.2 - TRAFFIC STUDY

THE APPLICANT REQUESTS A WAIVER FROM THIS SECTION OF THE ZONING BYLAWS. THERE WILL BE NEGLIGIBLE TRAFFIC GENERATION FROM THE PROPOSED SOLAR ELECTRIC GENERATING FACILITY.



LOCUS MAP
1" = 1000'

OWNER OF RECORD:
HILLTOP PROPERTIES, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

GRAFTON ASSESSORS INFORMATION:
MAP 133, PARCEL 1B
217,660± S.F. / 5.00± ACRES

GRAFTON ZONING INFORMATION:
ZONE: OFFICE-LIGHT INDUSTRIAL
MINIMUM AREA: 40,000 S.F.
MINIMUM FRONTAGE: 120'
SETBACKS: FRONT 40', SIDE 35', REAR 35'
MAXIMUM BUILDING COVERAGE (% OF LOT): 40%

DEED REFERENCES:
BK. 43962, PG. 36
BK. 51357, PG. 238

PLAN REFERENCES:
P.B. 788, PL. 124
P.B. 874, PL. 6
P.B. 882, PL. 99

Table with 4 columns: DRAWING DATE, LAST REVISION, SHEET NO., SHEET TITLE. Rows include COVER SHEET, LEGEND, ABBREVIATIONS & GENERAL NOTES, EXISTING CONDITIONS PLAN, LAYOUT & MATERIALS PLAN, UTILITY PLAN, GRADING & DRAINAGE PLAN, LANDSCAPING & LIGHTING PLAN, ROOF MOUNTED SOLAR PLAN, and CONSTRUCTION DETAILS.

GOVERNMENT/UTILITY CONTACTS

GRAFTON PLANNING DEPARTMENT
30 PROVIDENCE ROAD
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F: 508.839.4602
ATTN: JOSEPH LAYDON, TOWN PLANNER

GRAFTON FIRE DEPARTMENT
26 UPTON STREET
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ATTN: MICHAEL GAUTHIER, CHIEF

GRAFTON BOARD OF HEALTH
30 PROVIDENCE ROAD
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30 PROVIDENCE ROAD
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ATTN: MARIA MAST, AGENT

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28 PROVIDENCE ROAD
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F: 508.839.0106
ATTN: NORMAND A. CREPEAU, CHIEF

MASSACHUSETTS ELECTRIC CO.
1.800.322.3223
VERIZON COMMUNICATIONS
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GRAFTON BUILDING DEPARTMENT
30 PROVIDENCE ROAD
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APPROVAL UNDER SITE PLAN REVIEW.
GRAFTON PLANNING BOARD

BEING A MAJORITY

DATE:

PROJECT:
MAP 133, PARCEL 1B
PROPOSED SELF-STORAGE FACILITY
PROPOSED ROOF MOUNTED SOLAR

100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

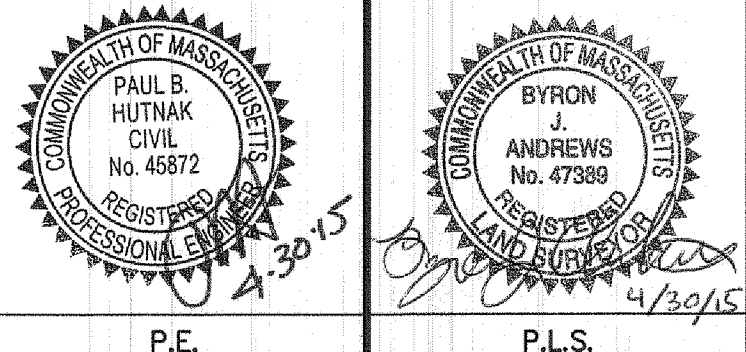
APPLICANT:

HILLTOP SELF-STORAGE
OF GRAFTON, LLC

100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

Table with 3 columns: NO., DATE, DESCRIPTION. Rows include revisions for PER REVIEW COMMENTS and PER PLANNING COMMENTS.

Table with 2 columns: CAD FILE, DRAWN BY, CHECKED BY, DATE, PROJECT NO. Values include file paths, names (TRB, SJO, PBH, BJA), dates (FEBRUARY 4, 2015), and project number (2014-316).



SHEET TITLE
COVER SHEET

DRAWING NO.
C-0.0
PLAN NO. L-4502

STORMWATER MANAGEMENT SYSTEM (SMS)
OPERATION AND MAINTENANCE INSTRUCTIONS

PART 1 – STORMWATER MANAGEMENT SYSTEM DESCRIPTION

1A. OWNER:

HILLTOP PROPERTIES, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

1B. OPERATION:

STORMWATER CARRIES POLLUTANTS AND WILL BE TREATED BEFORE DISCHARGE TO OFF-SITE. THE SITE PLANS WHICH ACCOMPANY THESE INSTRUCTIONS SHOW THE COMPONENTS OF THE TREATMENT SYSTEM, DIRECTION OF FLOW AND NEARBY DISCHARGES.

STORMWATER ON PAVED AREAS IS COLLECTED IN CATCH BASINS (CB) WHICH HAVE A DEEP SUMP AND AN ELBOW PIPE OUTLET. THE SUMP COLLECTS SETTLEABLE COARSE SAND AND OTHER SOLIDS TO WHICH POLLUTANTS ADHERE. THESE SUMPS MUST BE CLEANED REGULARLY OR THE ACCUMULATED SEDIMENT WILL CLOG THE OUTLET PIPE. THE PIPE HAS AN INVERTED ELBOW WHICH DOES NOT ALLOW FLOATING OIL/GAS FROM LEAVING THE CB. THE ELBOW IS SUSCEPTIBLE TO CLOGGING AND MUST BE CHECKED IF A CLOGGING PROBLEM ARISES.

PART 2 – RESPONSIBILITY FOR OPERATION AND MAINTENANCE

2A. PARTY RESPONSIBLE DURING CONSTRUCTION:

CONTRACTOR TO BE DETERMINED.

2B. PARTY RESPONSIBLE FOR POST-CONSTRUCTION:

HILLTOP SELF-STORAGE OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

PART 3 – INSPECTION AND MAINTENANCE SCHEDULE

3A. CONSTRUCTION SCHEDULE

SEE GENERAL NOTES (EROSION CONTROL)

3B. POST-CONSTRUCTION SCHEDULE

PARKING LOT AND DRIVEWAYS

INSPECT ALL CATCH BASINS (CB) AT LOCATIONS SHOWN ON SITE PLANS. LOOK FOR SETTLING OF PAVEMENT. REPAIR AS REQUIRED. LOOK AT LEVEL OF SAND, SILT IN BOTTOM. HAVE BOTTOM CLEANED IF OUTLET PIPE BLOCKED. VERIFY THAT ELBOW (OIL TRAP) ON PIPE OUTLET IS SECURELY IN PLACE. CLEAN ALL LEAVES, TRASH, AND PINE NEEDLES OUT OF CB GRATE.

LOOK FOR SIGNS OF CRACKING, POTHOLES. REPAIR AS REQUIRED.

LOOK FOR SIGNS OF EROSION AT EDGES OF PARKING LOT. INSPECT FOR BROKEN CURB. SEVERE EROSION MAY BE CAUSED BY PIPE BLOCKAGE AND RESULTING OVERFLOWS OUT OF CATCH BASINS. REMOVE DRAIN MANHOLE COVERS AND CB GRATES IN AREA AND LOOK FOR BLOCKAGES WHERE SURFACE EROSION IS EVIDENT.

WALLS

LOOK FOR EROSION AT TOP AND BOTTOM OF ALL RETAINING WALLS. LOOK AT WALL ENDS AND FACE FOR DISLODGED WALL SEGMENTS. REPAIR AS REQUIRED.

LANDSCAPING

INSPECT FOR DISEASED/DYING TREES, SHRUBS, GROUND COVER, GRASS. REPLACE AS REQUIRED.

INSPECT MULCH BEDS. SUPPLEMENT AS REQUIRED TO PROVIDE THE SPECIFIED MINIMUM DEPTH (LOOSE MEASURE).

3B.2. NON-ROUTINE SCHEDULE

DEEP SUMP, CATCH BASINS

HAVE ALL CATCH BASINS CLEANED OUT COMPLETELY ANNUALLY.

LAWN

INSPECT AFTER EACH SIGNIFICANT RAINFALL (½" OR MORE) FOR FIRST 6 MONTHS AFTER CONSTRUCTION TO ENSURE SURFACE VEGETATION IS HEALTHY, DISCHARGE DEVICES ARE NOT BLOCKED AND BANKS ARE NOT ERODING.

CHECK ALL COMPONENTS AFTER EACH MAJOR STORM (MORE THAN 2" RAINFALL IN 24 HOURS). CLEAN/REPAIR AS REQUIRED.

SNOW REMOVAL

ANY STOCKPILING OF SNOW SHALL BE CONDUCTED OUTSIDE THE BUFFER ZONE.

GENERAL NOTES

1.0. TOPOGRAPHIC AND PROPERTY LINE INFORMATION

1.1. NOTICE TO CONTRACTOR: THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

1.2. PROPERTY LINE AND TOPOGRAPHY: EXISTING PROPERTY LINE, UTILITY INFORMATION AND TOPOGRAPHY PROVIDED BY ANDREWS SURVEY & ENGINEERING, INC. SEE PLAN HEREIN.

1.3. DATUM: NGVD29

1.4. BENCH MARKS: NGVD29 (SEE EXISTING CONDITIONS PLAN)

1.5. COORDINATE SYSTEM: ASSUMED

1.6. CONSTRUCTION STAKING CONTROL: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY TO PERFORM THE WORK.

1.7. FLOODPLAIN: THE PROPERTY DOES NOT LIE IN A FLOOD HAZARD AREA OR 100-YEAR FLOODPLAIN ACCORDING TO THE MOST RECENT FLOOD INSURANCE RATE MAPS FOR GRAFTON.

1.8. WETLAND DELINEATION TAKEN FROM PLAN ENTITLED "RESOURCE AREA DELINEATION PLAN" FOR 116 MILFORD ROAD IN SOUTH GRAFTON, MASS, DATED JULY 22, 2008, REVISED SEPTEMBER 11, 2008, BY GUERRIERE & HALLON, INC.

1.9. A COPY OF THESE APPROVED PLANS AND APPLICABLE SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.

1.10. ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE CITY ENGINEER PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.

1.11. ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT, SHALL BE DONE AT THE DEVELOPER'S EXPENSE.

2.0. EROSION, SEDIMENTATION, AND EROSION CONTROL (STORMWATER POLLUTION PREVENTION PLAN)

2.1. GENERAL

2.1.1. THE FIRST STAGE INVOLVES ACTIVITIES NEEDED TO ADDRESS STORMWATER MANAGEMENT, EXCAVATING MATERIAL DESIGNATED FOR OFF-SITE REMOVAL OR ON-SITE RELOCATION AND FENCING SELECTED AREAS. STAGE ONE WILL PREPARE SITE FOR CONVENTIONAL CONSTRUCTION.

2.1.2. THE SECOND STAGE WILL CONSIST OF ROUTINE CONSTRUCTION INVOLVING BUILDING, PAWING, LANDSCAPING AND UTILITIES.

2.1.3. THERE ARE GENERAL PHASES OF CONSTRUCTION. IN EACH PHASE OF CONSTRUCTION, IMPLEMENT STANDARD EROSION AND SEDIMENT CONTROL PRACTICES PRIOR TO INITIATING EARTH DISTURBING ACTIVITIES, AND MAINTAIN THESE PRACTICES THROUGHOUT THE COURSE OF CONSTRUCTION.

2.1.4. DURING DEMOLITION, EXCAVATIONS AS MUCH AS 10 FEET MAY BE REQUIRED FOR THE INSTALLATION OF FOUNDATIONS, RETAINING WALLS, UNDERPINNING METHODS, AND UTILITIES. EXCAVATIONS SHALL BE CUT TO A STABLE SLOPE OR BE TEMPORARILY BRACED, DEPENDING ON THE EXCAVATION DEPTHS AND THE ENCOUNTERED SUBSURFACE CONDITIONS. THE CONTRACTOR SHALL SUBMIT EXCAVATION AND SLOPE STABILIZATION METHODS PRIOR TO THE START OF CONSTRUCTION TO THE ENGINEER FOR REVIEW.

2.1.5. BASED ON THE COMPOSITION OF SOILS ENCOUNTERED DURING THE EXPLORATION, SITE SOILS ARE GENERALLY CLASSIFIED AS TYPE B AND TYPE C SOILS AS DEFINED BY OSHA 29 CFR 1926.652 APPENDIX A. TEMPORARY CONSTRUCTION SLOPES SHOULD BE DESIGNED IN STRICT COMPLIANCE WITH THE MOST RECENT GOVERNING REGULATIONS. STOCKPILES SHOULD BE PLACED WELL AWAY FROM THE EDGE OF THE EXCAVATION AND THEIR HEIGHT SHOULD BE CONTROLLED TO PREVENT SURCHARGE TO THE SIDES OF THE EXCAVATION. SURFACE DRAINAGE SHOULD BE CONTROLLED TO AVOID FLOW OF SURFACE WATER INTO THE EXCAVATIONS.

2.1.6. CONSTRUCTION SLOPES SHOULD BE REVIEWED FOR MASS MOVEMENT. IF POTENTIAL STABILITY PROBLEMS ARE OBSERVED, WORK SHOULD CEASE AND A GEOTECHNICAL ENGINEER SHOULD BE CONTACTED IMMEDIATELY. THE RESPONSIBILITY FOR EXCAVATION SAFETY AND STABILITY OF TEMPORARY CONSTRUCTION SLOPES SHOULD LIE SOLELY WITH THE CONTRACTOR.

TYPICAL PRACTICES TO BE APPLIED TO THE SITE INCLUDE THE FOLLOWING:

SIX TO EARTH DISTURBANCE IN ANY WORK AREA, INSTALL SILTATION BARRIERS (SILT FENCE WITH STRAWBALES) BETWEEN THE WORK AREA AND THE SURFACE WATER RESOURCE TO WHICH IT DRAINS.

DISCHARGE WATER FROM DEWATERING OPERATIONS TO A TEMPORARY SEDIMENTATION BASIN ON SITE PRIOR TO DISCHARGING THE WATER TO THE STREET DRAINAGE SYSTEM.

PROVIDE TEMPORARY BERMS AND SWALES TO DIVERT SURFACE WATER AWAY FROM THE AREAS THAT WILL BE EXPOSED BY CONSTRUCTION ACTIVITY TO MINIMIZE THE AMOUNT OF SURFACE WATER COMING INTO CONTACT WITH EXPOSED SOILS. PROVIDE STABLE OUTLETS FOR THESE DEVICES, AND LINE OR VEGETATE THESE DIVERSIONS TO PROVIDE FOR THEIR STABILITY DURING CONSTRUCTION.

LIMIT THE EXTENT OF EXPOSED SOILS TO AREAS THAT CAN BE WORKED AND RESTABILIZED WITHIN THE CONSTRUCTION SEASON AND DURING THE SPECIFIC CONSTRUCTION PHASE.

WHEN EARTHWORK CONSTRUCTION ACTIVITY IN AN AREA IS COMPLETE, STABILIZE THE AREA WITH A SUITABLE SURFACE AS DESCRIBED BELOW.

IN ADDITION TO THESE PRACTICES, FOLLOW THE SPECIAL PRACTICES DESCRIBED BELOW. COMPLY WITH THE DIRECTIONS OF THE APPLICANT'S REPRESENTATIVE TO ADDRESS EROSION AND SEDIMENTATION CONDITIONS THAT MAY ARISE ON A CASE BY CASE BASIS DURING CONSTRUCTION.

THE FOLLOWING IS A DESCRIPTION OF MINIMUM CONSTRUCTION REQUIREMENTS AND DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES WITH REGARD TO DETERMINING THE ADEQUACY OF MEANS AND METHODS OF CONSTRUCTION.

2.2. MAINTENANCE

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED:

2.2.1. SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE VEGETATION ESTABLISHMENT.

2.2.2. TEMPORARY SEDIMENTATION BASINS WILL BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN STORAGE CAPACITY.

2.2.3. TEMPORARY DRAINAGE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY.

2.2.4. THE STRAW WATTLE AND SILTATION FENCING BARRIERS AND OTHER EROSION AND SEDIMENT CONTROL MEASURES/DEVICES SHALL BE INSPECTED, CLEANED, REPLACED AND/OR REPAIRED AS NECESSARY, PERIODICALLY AND AFTER EACH SIGNIFICANT RAINFALL.

2.2.5. THE EROSION AND SEDIMENTATION CONTROL SYSTEM DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES AND/OR STORM DRAINAGE SYSTEMS.

2.2.6. IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION, MUST CEASE AND THE OWNER/CONTRACTOR WILL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.

2.3. GENERAL

2.3.1. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH (USDA) NATURAL RESOURCES CONSERVATION SERVICE (NRCS, FORMERLY SCS) GUIDELINES AND ALL LOCAL, COUNTY AND MUNICIPAL REGULATIONS.

2.3.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.

2.3.3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE EROSION AND SEDIMENTATION CONTROLS DURING CONSTRUCTION, AND THESE CONTROLS SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND GROUNDCOVER IS ESTABLISHED.

2.3.4. ALL WORK SHALL BE IN ACCORDANCE WITH THE PERMITS AND APPROVALS ISSUED AND THE CONSTRUCTION SPECIFICATIONS.

2.3.5. STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH STAKED STRAWBALES AND/OR SILTATION FENCES TO PREVENT AND/OR CONTROL SILTATION AND EROSION.

2.3.6. TOPS OF STOCKPILES SHALL BE COVERED IN SUCH A MANNER THAT STORMWATER DOES NOT INFILTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.

2.3.7. ALL DISTURBED OR EXPOSED AREAS SUBJECT TO EROSION SHALL BE STABILIZED WITH MULCH OR SEEDED FOR TEMPORARY VEGETATIVE COVER. NO AREA SUBJECT TO EROSION SHALL BE LEFT DISTURBED AND UNSTABILIZED FOR PERIODS LONGER THAN IS ABSOLUTELY NECESSARY TO CARRY OUT THAT PORTION OF THE CONSTRUCTION WORK. SEEDING SHALL BE PERFORMED BETWEEN THE MONTHS OF APRIL AND SEPTEMBER ONLY.

2.3.8. STRAWBALE DIKES SHALL BE CONSTRUCTED AT ALL EXISTING & PROPOSED CATCH BASINS LOCATED IN FILL AREAS & SUBJECT TO STORMWATER RUN-OFF FROM PROPOSED FILL AREAS DURING CONSTRUCTION, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. NO SEDIMENTS SHALL ENTER THE ON-SITE OR OFF-SITE DRAINAGE SYSTEMS AT ANY TIME.

2.3.9. CULVERT/PIPE INLETS AND OUTFALLS SHALL BE PROTECTED BY STRAWBALE FILTERS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

2.3.10. STRAWBALES SHALL BE PERIODICALLY INSPECTED AND REPLACED AS REQUIRED.

2.3.11. ALL PROPOSED NON-RIPRAP SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH CURLEX BLANKETS AND PROTECTED FROM EROSION.

2.3.12. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL STRAWBALES AND EXTRA SILTATION FENCING FOR INSTALLATION AT THE DIRECTION OF THE OWNER'S REPRESENTATIVE OR LOCAL OFFICIALS TO MITIGATE ANY EMERGENCY CONDITION.

2.3.13. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS TO CARRY OUT THE WORK INCLUDING BUT NOT LIMITED TO DEMOLITION.

2.3.14. DISPOSAL OF ALL DEMOLISHED MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE HAULED OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS.

2.3.15. THE LIMIT OF WORK LINE FOR THE AREA TO BE CLEARED AND GRUBBED SHALL BE THE SAME AS THE LIMIT OF WORK LINE NECESSARY FOR GRADING PURPOSES, (I.E., THE GRADING LIMITS AROUND THE PERIMETER OF THE PROJECT AREA).

2.3.16. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

2.3.17. FOLLOWING THE ADDITION OF A BINDER COURSE, THE CONTRACTOR SHALL SWEEP ALL ON-SITE PAVEMENT, IF NECESSARY, UNTIL ALL SITE CONSTRUCTION IS COMPLETED.

3.0. STORM DRAINAGE

3.1. UNLESS INDICATED OTHERWISE, STORM DRAIN PIPING (INDICATED BY LETTER "D") AND ALL ROOF DRAINS (RD) SHALL BE CORRUGATED POLYETHYLENE PIPE (CPE) PER ASTM M284 M284 AND M285 MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC. CPE SHALL BE ADS N-12 PIPE AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. OR HANCOCK HI Q PIPE AS MANUFACTURED BY HANCOCK, INC. OR APPROVED EQUAL.

3.2. STORM DRAIN MANHOLES (INDICATED BY LETTERS "DMH") SHALL BE PRECAST 4', OR 6' DIAMETER CONCRETE PER ASTM C478 (AS CALLED FOR ON DRAWINGS OR FIELD CONDITIONS REQUIRE) WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C443. PIPE TO MANHOLE CONNECTIONS SHALL BE MORTARED PIPE OPENINGS.

3.3. CATCH BASINS (INDICATED BY LETTERS "CB") SHALL BE PRECAST 5' DIAMETER CONCRETE PER ASTM C478 WITH RUBBER GASKET JOINTS CONFORMING TO ASTM C443, WITH 4 FOOT SUMP AND 4 FOOT TRAP OUTLET ELBOW. PIPE TO STRUCTURE CONNECTIONS SHALL BE MORTARED PIPE OPENINGS.

3.4. COORDINATES OF MANHOLES AND CATCH BASINS REFER TO CENTERS OF STRUCTURES.

3.5. ROOF DRAIN SYSTEM IS SHOWN FOR SCHEMATIC PURPOSES. ALL ROOF DRAIN PIPES SHALL BE SIX INCH DIAMETER WITH A MINIMUM SLOPE OF .50% UNLESS OTHERWISE INDICATED. SEE ARCHITECT PLANS FOR EXACT LOCATION AND NUMBER OF DOWNSPOUTS. NO OFFSETS ALLOWED.

3.6. PROVIDE SIX INCH VERTICAL AND THREE FOOT HORIZONTAL CLEARANCE (OUTSIDE SURFACES) BETWEEN STORM DRAIN LINES AND OTHER UTILITY PIPE AND CONDUITS PROVIDED.

3.7. PROVIDE BEDDING AND BACKFILL IN TRENCHES PER DETAIL.

3.8. ALL DRAINAGE PIPES WITHIN TEN FEET OF THE BUILDING FOUNDATION ARE TO BE DUCTILE IRON. INSTALLATION OF ALL PIPING SHALL BE THE RESPONSIBILITY OF THE PLUMBING SUBCONTRACTOR.

3.9. DURING CONSTRUCTION, ALL EXISTING AND NEWLY INSTALLED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM SEDIMENTS.

3.10. ALL STORM MANHOLES SHALL CONFORM TO DETAIL PROVIDED HEREIN.

3.11. MANHOLE FRAME AND GRATE SHALL CONFORM TO MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD 202.6.0 AND 202.8.0. THE COVER SHALL BE MARKED "DRAIN" IN RAISED LETTERS. MINIMUM WEIGHT OF THE FRAME SHALL BE 285 POUNDS. MINIMUM WEIGHT OF THE COVER SHALL BE 200 POUNDS.

3.12. ALL CATCH BASINS SHALL CONFORM TO DETAIL PROVIDE HEREIN.

3.13. ROOF DRAIN MANIFOLD PIPES SHALL BE A MINIMUM OF ELEVEN FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.

4.0. SEWER AND UTILITY SEPARATION

4.1. A MINIMUM 10 FEET CLEAR HORIZONTAL DISTANCE SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAINS AND WATER MAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN.

5.0. ELECTRIC AND COMMUNICATIONS

5.1. INSTALLATION OF COMMUNICATIONS (TELEPHONE, CABLE AND FIRE ALARM) SYSTEMS SHALL BE COORDINATED AND SCHEDULED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY COMPANY SERVICING THE PROJECT SITE.

5.2. COORDINATES REFER TO THE CENTER OF STRUCTURES UNLESS OTHERWISE NOTED OR DETAILED. CONTRACTOR SHALL COORDINATE LIGHT BASE LOCATIONS WITH PROPOSED CURBING AND PARKING LOT STRIPING.

5.3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ELECTRICAL SERVICE PRIOR TO ORDERING ANY EQUIPMENT.

6.0. PAVEMENT AND SIDE WALKS

6.1. SAWCUT EXISTING ASPHALT AT LEAST 1' FROM EXISTING EDGE TO MATCH PAVEMENT.

6.2. JOINTS BETWEEN NEW BITUMINOUS CONCRETE PAVEMENT AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN AND BACKSANDS.

6.3. SIDEWALKS SHALL BE CONSTRUCTED WITH BRICK, DECORATIVE PAVERS, OR OTHER APPROVED MATERIALS.

6.4. SIDEWALK MATERIALS SHALL BE APPROVED BY THE PLANNING BOARD PRIOR TO INSTALLATION.

7.0. CURBING

7.1. CURBING SHALL BE CAPE COD BERM (CCB).

7.2. DIMENSIONS REFER TO FACE OF CURB UNLESS NOTED OTHERWISE.

8.0. PARKING TRAFFIC CONTROL MARKINGS AND SIGNAGE

8.1. INCLUDING, BUT NOT LIMITED TO, ALL CROSSWALKS, STOP LINES AND LEGENDS.

8.1.1. LEGENDS SHALL BE PERFORMED PERMANENT PLASTIC. PAVEMENT MARKINGS SHALL BE THERMO PLASTIC (AUXO). THE MARKINGS, LEGENDS SHALL BE INSTALLED IN ACCORDANCE WITH THE RELEVANT PORTIONS OF MHD STANDARD SPECIFICATIONS. THE CONTRACTOR'S ATTENTION ALSO IS DIRECTED TO THE STANDARD SPECIFICATIONS, FOR REQUIREMENTS REGARDING THE AMBIENT AIR TEMPERATURE AT THE TIME OF APPLICATION.

8.2. HANDICAP ACCESSIBLE PARKING SPACES SHALL CONFORM TO THE REQUIREMENTS OF THE ZONING BYLAWS AND THE AMERICANS WITH DISABILITIES ACT (A.D.A.) OF JANUARY, 1992 UNLESS OTHERWISE NOTED.

8.2.1. ACCESSIBLE PARKING SPACES DESIGNATED WITH A "HCV" SHALL BE SIGNED AS "VAN ACCESSIBLE" PER A.D.A. 4.1.2.5b.

8.2.2. ALL LIMITS OF PAVEMENT SHALL BE CURBED UNLESS NOTED OR DETAILED OTHERWISE.

8.2.3. ALL STANDARD PARKING SPACES SHALL BE 9 FT WIDTH BY 18 FT LENGTH, WITH 24 FEET AISLES, UNLESS NOTED OR DETAILED OTHERWISE.

8.2.4. PARKING AND TRAFFIC CONTROL PLANS ARE SCHEMATIC AND FOR LOCATION OF MARKINGS ONLY. SPECIFIC DETAILS FOR INSTALLATION OF PAVEMENT MARKING ARE PROVIDED AS PART OF THIS PLAN SET.

9.0. PLANTING AND LANDSCAPING

9.1. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE SITE CLEAN OF MISCELLANEOUS DEBRIS THROUGHOUT THE CONSTRUCTION PERIOD. ALL WASTE MATERIAL IS TO BE DISPOSED OF TO AN OFF-SITE LOCATION.

9.1. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS, AND SHALL OBTAIN ALL NECESSARY PERMITS FOR THIS PROJECT.

9.1. LAYOUT: ALL NOTES AND DIMENSIONS ARE TYPICAL UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE SQUARE (PARALLEL OR PERPENDICULAR) UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY THE OWNER/OWNER'S REPRESENTATIVE IMMEDIATELY IN THE EVENT OF ANY DISCREPANCIES FOUND IN THE CONTRACT DOCUMENTS AND/OR IN THE FIELD, OR OF CONDITIONS UNCOVERED IN THE WORK WHICH ARE NOT REFLECTED IN THE PLANS.

9.4. LOAM: LOAM MOVED DURING THE COURSE OF CONSTRUCTION SHALL BE RETAINED AND DISTRIBUTED WITHIN THE SITE IN ACCORDANCE WITH THE LANDSCAPE PLAN. STOCKPILED LOAM SHALL NOT BE MIXED WITH ANY SUBSOIL OR UNSUITABLE MATERIALS. ALL EXCESS LOAM SHALL REMAIN ON THE PROPERTY OF THE OWNER. NEW LOAM IF REQUIRED TO PROVIDE THE SPECIFIED DEPTH, SHALL BE A FERTILE, FINE MEDIUM TEXTURED SANDY LOAM FREE OF MATERIAL TOXIC TO HEALTHY PLANT GROWTH. LOAM SHALL ALSO BE FREE OF ALL STUMPS, ROOTS, STONES AND OTHER EXTRANEOUS MATTER AN INCH (1") OR GREATER IN DIAMETER. THE PH SHALL BE BETWEEN 5.5 AND 7.5 WHEN TESTED.

9.5. LAWN PREPARATION: REMOVE ALL DEBRIS AND OTHER INORGANIC MATERIALS ON THE PREPARED SUBGRADE, RESHAPE AND DRESS ANY DAMAGED OR ERODED AREA PRIOR TO SPREADING THE LOAM. SCARIFY AND LOOSEN SUBGRADE IN ANY AREAS WHERE COMPACTION MAY HAVE OCCURRED. SPREAD STOCKPILED AND OFF-SITE LOAM ON ALL DISTURBED AREAS TO PRODUCE A DEPTH OF 6". FINE GRADE LOAMED AREAS TO PRODUCE A SMOOTH AND UNBROKEN FINISH GRADE TO THE REQUIRED DEPTH. APPLY A STARTER FERTILIZER (10-20-10) AT A RATE OF 20 LBS. PER 1000 SQUARE FEET AND LIME AT A RATE OF 40 LBS. PER 1000 SQUARE FEET. ONCE SPREAD, THE FERTILIZER AND LIME SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM. THE LOAM SHALL BE ROLLED, AND DEPRESSION SHALL BE TOP DRESSED AND RAKED TO CREATE A SMOOTH SURFACE.

9.6. SEEDING: SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 AND MAY 31 OR AUGUST 15 AND OCTOBER 15 ONLY. SEED SHALL BE PURE, LIVE, FRESH SEED FROM COMMERCIAL SOURCES MEETING AND LABELED IN ACCORDANCE WITH STATE AND FEDERAL RULES AND REGULATIONS. THE SEED MIXTURE SHALL BE:

PROPORTION BY TYPE	WEIGHT	PUR.	GERM.
PALMER PERENNIAL PREGRASS	20.0%	95%	90%
PANZER PERENNIAL PREGRASS	20.0%	95%	90%
BARON KENTUCKY BLUEGRASS	30.0%	95%	85%
MERION KENTUCKY BLUEGRASS	30.0%	95%	85%
INERT MATERIALS 2.5% (MAXIMUM)			

SEEDED AREAS SHALL, AT A MINIMUM, INCLUDE ALL AREAS OF THE SITE THAT HAVE BEEN DISTURBED OR ARE BARREN UNLESS OTHERWISE NOTED ON THE PLANS. SEED SHALL BE APPLIED AT A RATE OF 7 LBS. PER 1000 SQUARE FEET.

9.7. PROTECTION OF EXISTING PLANTINGS: MAXIMUM EFFORT SHOULD BE MADE TO SAVE TREE OR OTHER PLANT SPECIMENS WHICH ARE LARGE FOR THEIR SPECIES, RARE TO THE AREA, OR OF SPECIAL HORTICULTURAL OR LANDSCAPE VALUE. CONTACT OWNER/LANDSCAPE ARCHITECT BEFORE REMOVING ANY SPECIMEN OF THIS TYPE UNLESS OTHERWISE NOTED ON THE PLANS. NO MATERIAL OR TEMPORARY SOIL DEPOSITS SHALL BE PLACED WITHIN THE DRIP LINE OF SHRUBS OR TREES DESIGNATED ON THE LANDSCAPE PLAN TO BE RETAINED. PROTECTIVE BARRIERS ARE TO BE INSTALLED AROUND EACH PLANT AND/OR GROUP OF PLANTS THAT ARE TO REMAIN ON THE SITE. BARRIERS SHALL NOT BE SUPPORTED BY THE PLANTS THEY ARE PROTECTING, BUT SHALL BE SELF SUPPORTING. THEY SHALL BE OF MINIMUM OF FOUR FEET (4') HIGH AND CONSTRUCTED OF A DURABLE MATERIAL, SUCH AS SNOW OR SILT FENCE, THAT WILL LAST UNTIL CONSTRUCTION IS COMPLETED.

9.8. PRUNING: THE CONTRACTOR SHALL CAREFULLY PRUNE BRANCHES IN THE WAY OF CONSTRUCTION BY USING ONLY APPROVED METHODS AND TOOLS. THE USE OF AXES FOR TRIMMING OR SPURS FOR CUMBING WILL NOT BE PERMITTED.

9.9. DISTURBED AREAS: ANY AREAS DISTURBED DURING THE COURSE OF CONSTRUCTION ARE TO BE RESTORED TO ORIGINAL (OR BETTER) CONDITION BY CONTRACTOR BEFORE COMPLETION OF THE PROJECT, AND ARE SUBJECT TO APPROVAL BY LANDSCAPE ARCHITECT AND OWNER. ALL GRASS AREAS DISTURBED DURING CONSTRUCTION SHALL BE YORR RAKED TO REMOVE STONES AND LOAMED AND SEEDED AS PER SPECIFICATIONS.

9.10. DRAINAGE SYSTEMS: CONTRACTOR IS RESPONSIBLE FOR GENERAL CLEAN-OUT OF ALL CATCH BASINS, MANHOLES, AND/OR OTHER DRAINAGE FEATURES ON THE SITE WHICH HAVE ACCUMULATED SEDIMENT AS A RESULT OF CONSTRUCTION ACTIVITIES.

10.0. MONITORING WELL

10.1. MONITORING WELL TO BE MINIMUM 2 INCH DIAMETER PERFORATED SCH-40 PVC PIPE.

10.2. PIPE SHALL BE WRAPPED IN FILTER FABRIC IF INSTALLED IN OPEN HOLE.

10.3. END OF PIPE TO BE HAVE SCREW CAP AND BE RAISED 1 FOOT ABOVE THE SURROUNDING GROUND.

LEGEND	
SYMBOL	DESCRIPTION
	CATCH BASIN
	DOUBLE CATCH BASIN
	BOLLARD
	GATE POST
	CONCRETE PAD OR SIDEWALK
	RIP RAP AREA
	UTILITY POLE
	BUILDING LIGHT
	DRAIN MANHOLE
	DRAIN LINE
	GAS LINE
	WATER LINE
	UNDERGROUND ELECTRIC
	GUARDRAIL
	CURB

ABBREVIATIONS	
ITEM	DESCRIPTION
S.F.	SQUARE FEET
N/F	NOW OR FORMERLY
F.F.E	FINISH FLOOR ELEVATION
DMH	DRAIN MANHOLE
CB	CATCH BASIN
DCB	DOUBLE CATCH BASIN
EOP	EDGE OF PAVEMENT
CCB	CAPE COD BERM
FES	FLARED END SECTION
HDPE	HIGH DENSITY POLYETHYLENE
RCP	REINFORCED CONCRETE PIPE
INV.	INVERT
TYP.	TYPICAL
BIT.	BITUMINOUS
CONC.	CONCRETE
TBM	TEMPORARY BENCH MARK

469.3	DTH#1	0"	462.3	DTH#2	0"	462.3	DTH#3	0"	465.0	DTH#4	0"	462.3	DTH#5	0"
468.8	A	6"	461.9	A	4"	461.4	A	10"	464.5	A	6"	461.3	A	12"
467.8	B	18"	461.3	B	12"	460.4	B	22"	463.0	B	24"	460.3	B	24"
461.3	C	96"	458.3	C	48"	454.4	C	95"	460.2	C1	58"	456.6	C	68"
REFUSAL @ NA	WEeping @ N/A		REFUSAL @ NA	WEeping @ N/A		REFUSAL @ NA	WEeping @ N/A		REFUSAL @ NA	WEeping @ 58"		REFUSAL @ NA	WEeping @ 50"	
WATER @ 92"	MOTTLES @ N/A		WATER @ 45"	MOTTLES @ 35"		WATER @ N/A	MOTTLES @ 40"		WATER @ 63"	MOTTLES @ 58"		WATER @ 65"	MOTTLES @ 50"	

TEST PIT DATA TAKEN FROM PLAN ENTITLED
"HILLTOP PLAZA" 116 MILFORD ROAD IN GRAFTON,
MASS, DATED FEBRUARY 2, 2009, REVISED APRIL
13, 2010, BY GUERRIERE & HALNOR, INC.

N/F
HILLTOP FARMS CONDOMINIUM
BK. 35391, PG. 134

MAP 132, PARCEL 100
N/F HILLTOP PROPERTIES, LLC
BK. 46864, PG. 162
P.B. 882, PL. 99

MAP 133, PARCEL 1B
217,660± S.F.
5.00± ACRES

MAP 133, PARCEL 1
N/F HILLTOP PROPERTIES, LLC
BK. 43962, PG. 36

MAP 25, PARCEL 105
N/F HILLTOP PROPERTIES, LLC
BK. 46864, PG. 162
P.B. 882, PL. 99

ASE

Andrews Survey & Engineering, Inc.
Land Surveying - Civil Engineering - Site Planning

P.O. Box 312, 104 Mendon Street
Uxbridge, Massachusetts 01569-0312
P: 508-278-3897 F: 508-278-2289

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APPROVAL UNDER SITE PLAN REVIEW
GRAFTON PLANNING BOARD

BEING A MAJORITY

DATE:

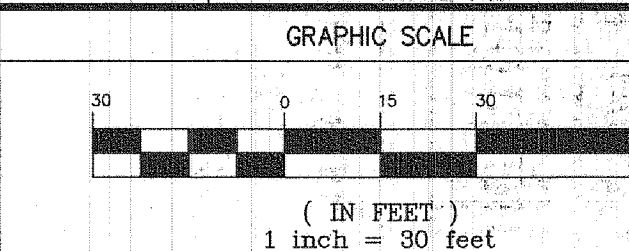
PROJECT:
MAP 133, PARCEL 1B
PROPOSED SELF-STORAGE FACILITY
PROPOSED ROOF MOUNTED SOLAR

100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

APPLICANT:
HILLTOP SELF-STORAGE
OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

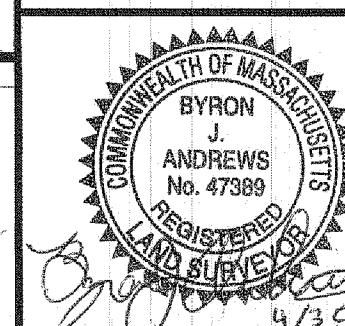
REVISIONS		
NO.	DATE	DESCRIPTION
1	4/3/15	PER REVIEW COMMENTS
2	4/28/15	PER PLANNING COMMENTS

CAD FILE	...dwg\2014-316_SP_R2.dwg
DRAWN BY	TRB
CHECKED BY	PBH
DATE	FEBRUARY 4, 2015
PROJECT NO.	2014-316



SHEET TITLE

EXISTING
CONDITIONS PLAN



DRAWING NO.

C-2.0

PLAN NO. L-4502

ZONING REQUIREMENTS

ZONE: OFFICE-LIGHT INDUSTRIAL
MINIMUM AREA: 40,000 S.F.
MINIMUM FRONTAGE: 120'
SETBACKS: FRONT 40', SIDE 35', REAR 35'
MAXIMUM BUILDING COVERAGE (% OF LOT): 40%

SITE DATA

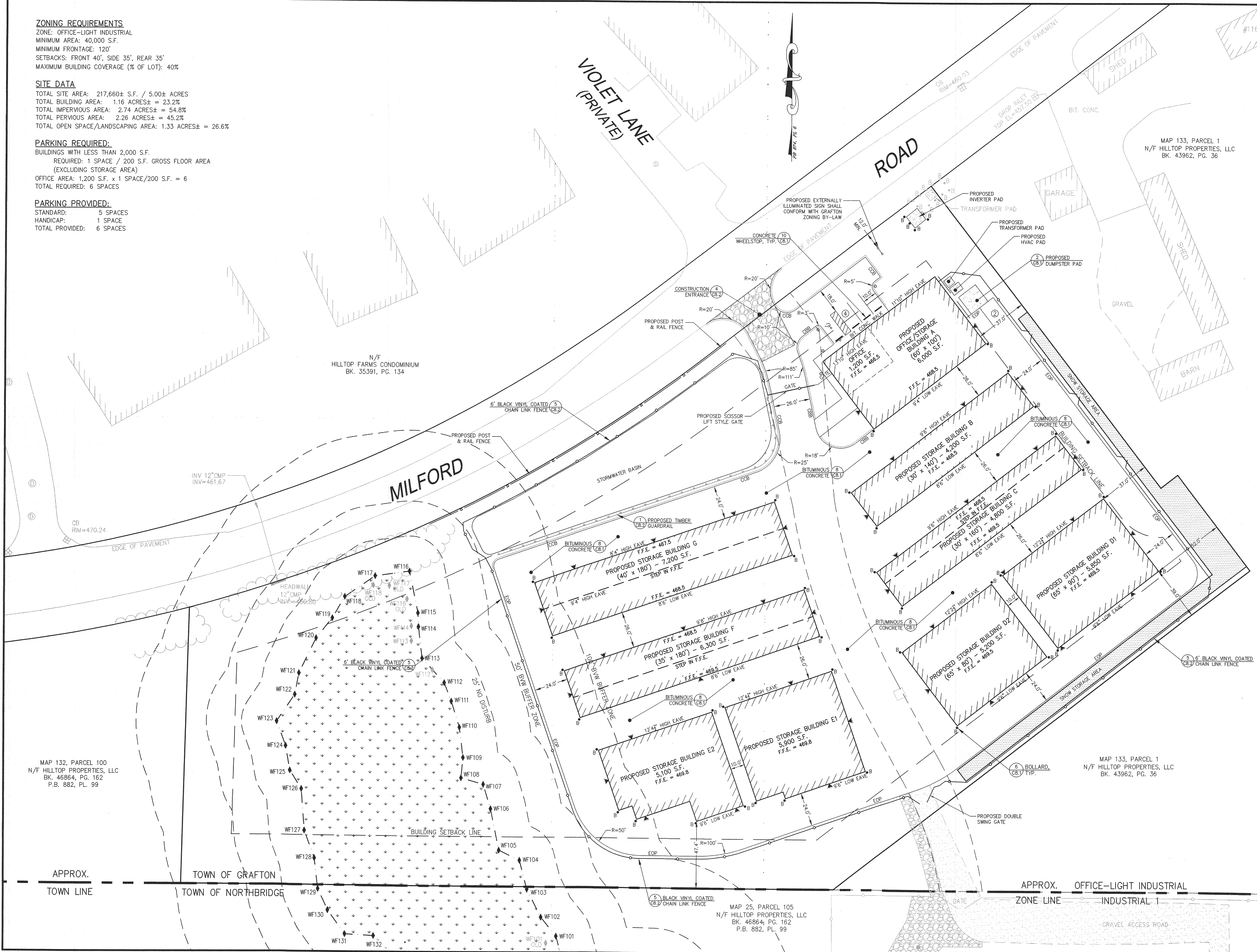
TOTAL SITE AREA: 217,660± S.F. / 5.00± ACRES
TOTAL BUILDING AREA: 1.16 ACRES± = 23.2%
TOTAL IMPERVIOUS AREA: 2.74 ACRES± = 54.8%
TOTAL PERVIOUS AREA: 2.26 ACRES± = 45.2%
TOTAL OPEN SPACE/LANDSCAPING AREA: 1.33 ACRES± = 26.6%

PARKING REQUIRED:

BUILDINGS WITH LESS THAN 2,000 S.F.
REQUIRED: 1 SPACE / 200 S.F. GROSS FLOOR AREA
(EXCLUDING STORAGE AREA)
OFFICE AREA: 1,200 S.F. x 1 SPACE/200 S.F. = 6
TOTAL REQUIRED: 6 SPACES

PARKING PROVIDED:

STANDARD: 5 SPACES
HANDICAP: 1 SPACE
TOTAL PROVIDED: 6 SPACES



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Land Surveying - Civil Engineering - Site Planning

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APPROVAL UNDER SITE PLAN REVIEW:
GRAFTON PLANNING BOARD

BEING A MAJORITY DATE:

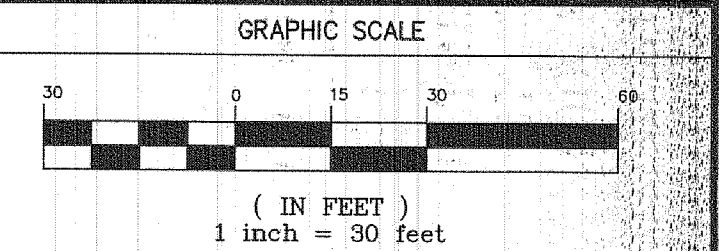
PROJECT:
MAP 133, PARCEL 1B
PROPOSED SELF-STORAGE FACILITY
PROPOSED ROOF MOUNTED SOLAR

100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

APPLICANT:
HILLTOP SELF-STORAGE
OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

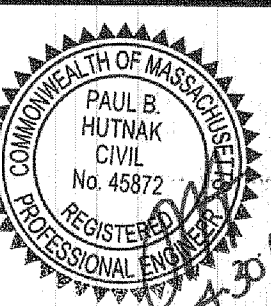
REVISIONS		
NO.	DATE	DESCRIPTION
1	4/3/15	PER REVIEW COMMENTS
2	4/28/15	PER PLANNING COMMENTS

CAD FILE	...\\dwg\2014-316_SP_R2.dwg
DRAWN BY	TRB
CHECKED BY	PBH
DATE	FEBRUARY 4, 2015
PROJECT NO.	2014-316



SHEET TITLE

LAYOUT &
MATERIALS PLAN



DRAWING NO.

C-3.0

PLAN NO. L-4502



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GRAFTON PLANNING BOARD

BEING A MAJORITY DATE:

PROJECT:
MAP 133, PARCEL 1B
PROPOSED SELF-STORAGE FACILITY
PROPOSED ROOF MOUNTED SOLAR

100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

APPLICANT:
HILLTOP SELF-STORAGE
OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

REVISIONS

NO.	DATE	DESCRIPTION
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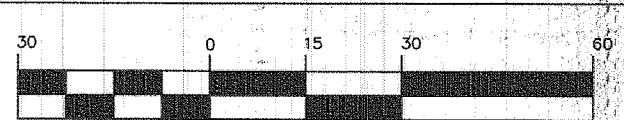
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CHECKED BY: PBH

DATE: FEBRUARY 4, 2015

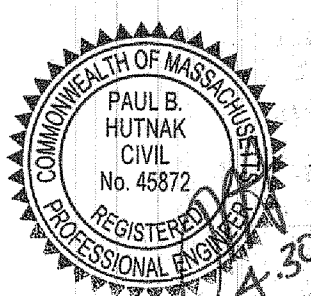
PROJECT NO.: 2014-316

GRAPHIC SCALE



SHEET TITLE

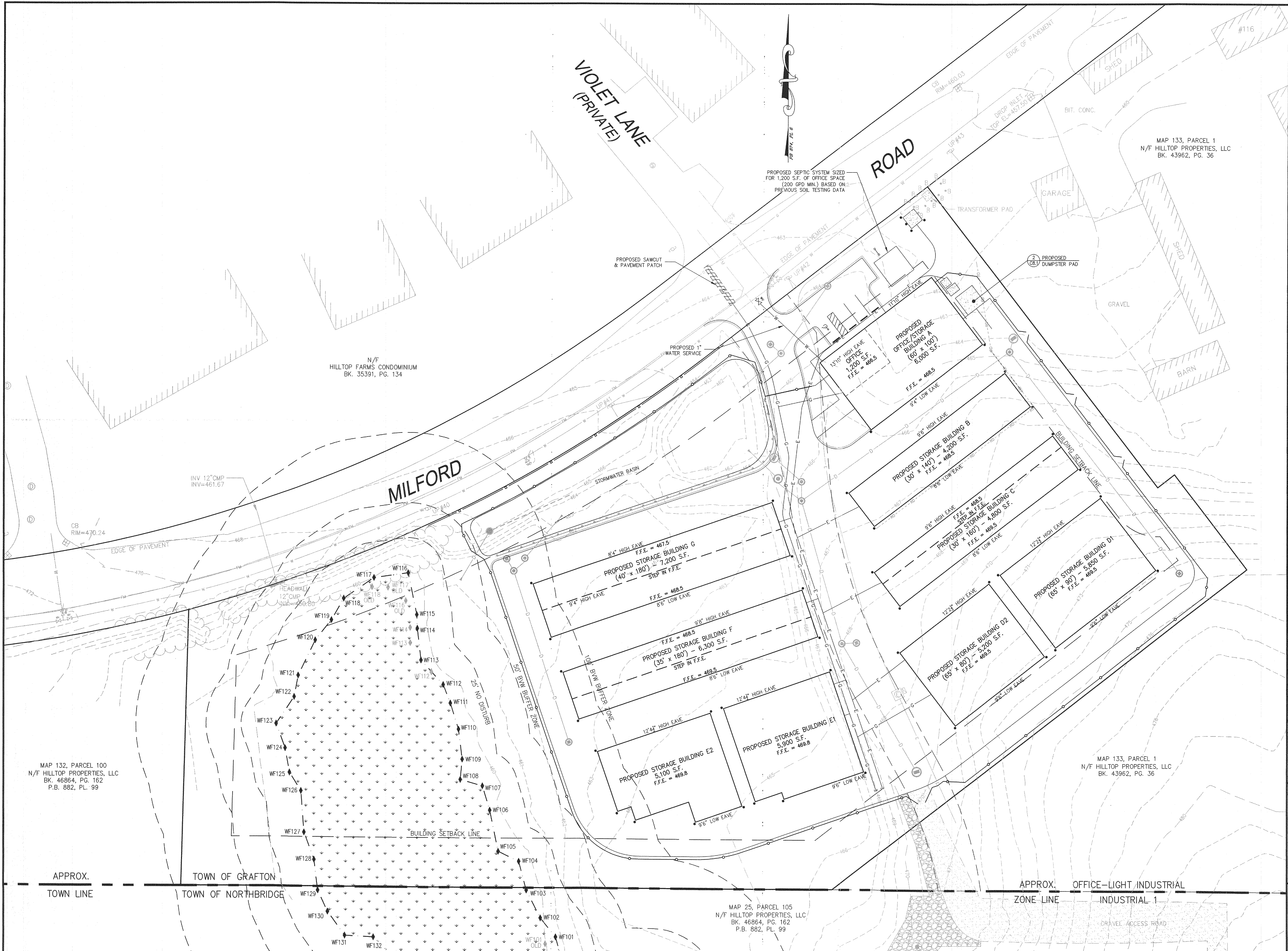
UTILITY PLAN



DRAWING NO.

C-4.0

PLAN NO. L-4502



DRAIN SCHEDULE

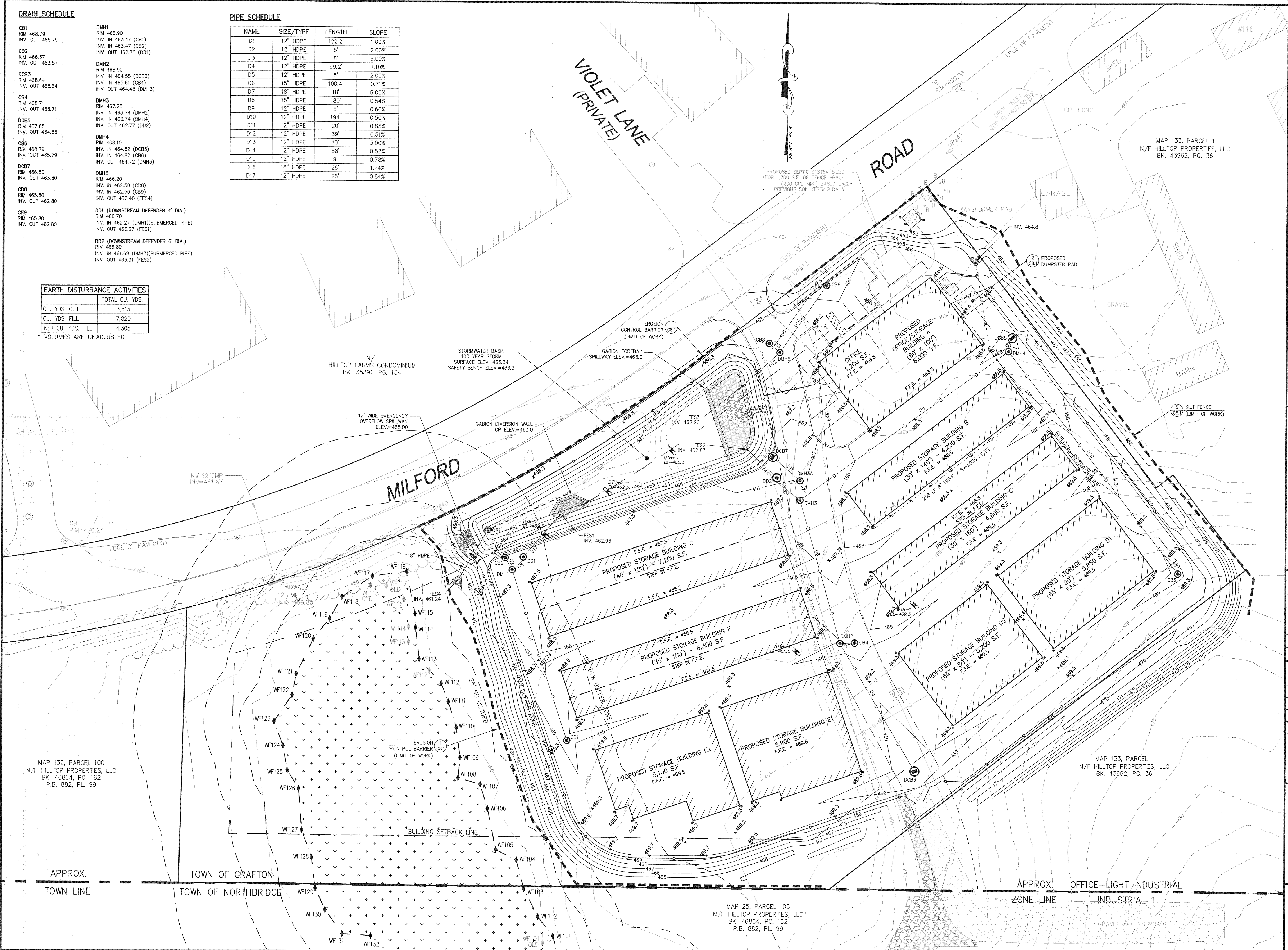
CB1 RIM 468.79 INV. OUT 465.79	DMH1 RIM 466.90 INV. IN 463.47 (CB1) INV. IN 463.47 (CB2) INV. OUT 462.75 (D01)
CB2 RIM 466.57 INV. OUT 463.57	DMH2 RIM 468.90 INV. IN 464.55 (DCB3) INV. IN 465.61 (CB4) INV. OUT 464.45 (DMH3)
DCB3 RIM 468.64 INV. OUT 465.64	DMH3 RIM 467.25 INV. IN 463.74 (DMH2) INV. IN 463.74 (DMH4) INV. OUT 462.77 (D02)
CB4 RIM 468.71 INV. OUT 465.71	DMH4 RIM 468.10 INV. IN 464.82 (DCB5) INV. IN 464.82 (CB6) INV. OUT 464.72 (DMH3)
DCB5 RIM 467.85 INV. OUT 464.85	DMH5 RIM 466.20 INV. IN 462.50 (CB8) INV. IN 462.50 (CB9) INV. OUT 462.40 (FES4)
CB6 RIM 468.79 INV. OUT 465.79	DD1 (DOWNSTREAM DEFENDER 4" DIA.) RIM 466.70 INV. IN 462.27 (DMH1)(SUBMERGED PIPE) INV. OUT 463.27 (FES1)
DCB7 RIM 466.50 INV. OUT 463.50	DD2 (DOWNSTREAM DEFENDER 6" DIA.) RIM 468.80 INV. IN 461.69 (DMH3)(SUBMERGED PIPE) INV. OUT 463.91 (FES2)
CB8 RIM 465.80 INV. OUT 462.80	
CB9 RIM 465.80 INV. OUT 462.80	

EARTH DISTURBANCE ACTIVITIES	
	TOTAL CU. YDS.
CU. YDS. CUT	3,515
CU. YDS. FILL	7,820
NET CU. YDS. FILL	4,305

* VOLUMES ARE UNADJUSTED

PIPE SCHEDULE

NAME	SIZE/TYPE	LENGTH	SLOPE
D1	12" HDPE	122.2'	1.09%
D2	12" HDPE	5'	2.00%
D3	12" HDPE	8'	6.00%
D4	12" HDPE	99.2'	1.10%
D5	12" HDPE	5'	2.00%
D6	15" HDPE	100.4'	0.71%
D7	18" HDPE	18'	6.00%
D8	15" HDPE	180'	0.54%
D9	12" HDPE	5'	0.60%
D10	12" HDPE	194'	0.50%
D11	12" HDPE	20'	0.85%
D12	12" HDPE	39'	0.51%
D13	12" HDPE	10'	3.00%
D14	12" HDPE	58'	0.52%
D15	12" HDPE	9'	0.78%
D16	18" HDPE	26'	1.24%
D17	12" HDPE	26'	0.84%

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APPROVAL UNDER SITE PLAN REVIEW.
GRAFTON PLANNING BOARD

BEING A MAJORITY

DATE:

PROJECT: MAP 133, PARCEL 1B
PROPOSED SELF-STORAGE FACILITY
PROPOSED ROOF MOUNTED SOLAR
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

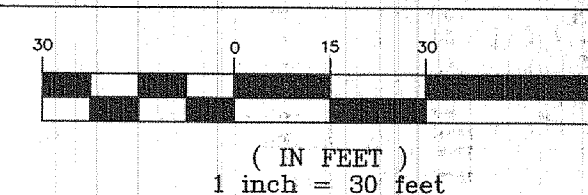
APPLICANT: HILLTOP SELF-STORAGE
OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

REVISIONS

NO.	DATE	DESCRIPTION
1	4/3/15	PER REVIEW COMMENTS
2	4/28/15	PER PLANNING COMMENTS

CAD FILE	...\\dwg\\2014-316_SP_R2.dwg
DRAWN BY	TRB
CHECKED BY	PBH
DATE	FEBRUARY 4, 2015
PROJECT NO.	2014-316

GRAPHIC SCALE

(IN FEET)
1 inch = 30 feet

SHEET TITLE

GRADING &
DRAINAGE PLAN

DRAWING NO.

C-5.0

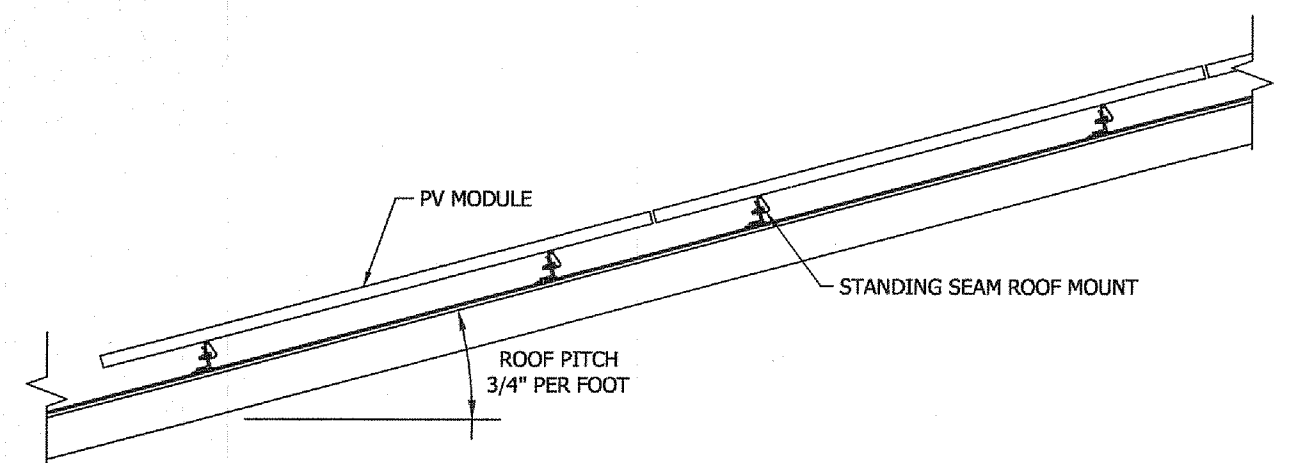
PLAN NO. L-4502

The site plan illustrates the layout of Hilltop Farms Condominium, featuring several proposed storage buildings and associated infrastructure. The plan is bounded by Violet Lane (Private) to the north, Road to the east, and Milford to the south. A stormwater basin is located near the center of the site. The proposed buildings include:

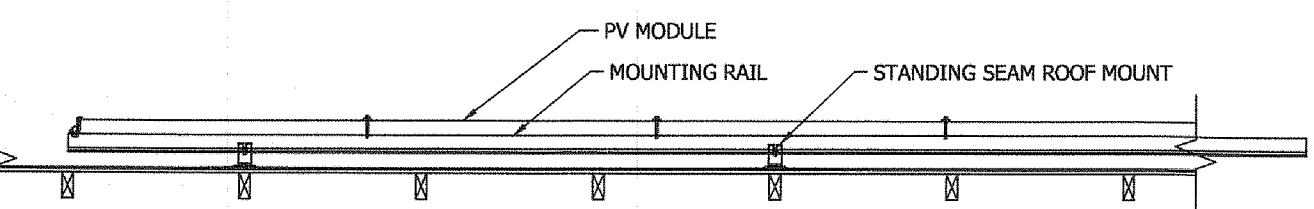
- Proposed Office Storage Building A:** 60' x 100', 6,000 S.F., F.F.E. = 468.5.
- Proposed Office Storage Building B:** 30' x 140', 4,200 S.F., F.F.E. = 468.5.
- Proposed Office Storage Building C:** 30' x 160', 4,800 S.F., F.F.E. = 469.5.
- Proposed Office Storage Building D1:** 65' x 90', 5,850 S.F., F.F.E. = 469.5.
- Proposed Office Storage Building D2:** 65' x 80', 5,200 S.F., F.F.E. = 469.5.
- Proposed Storage Building E1:** 5,900 S.F., F.F.E. = 469.8.
- Proposed Storage Building E2:** 5,100 S.F., F.F.E. = 469.8.
- Proposed Storage Building F:** 35' x 180', 6,300 S.F., F.F.E. = 468.5.
- Proposed Storage Building G:** 40' x 180', 7,200 S.F., F.F.E. = 467.5.

The plan also shows various parking areas (PYS, SBA, RKO, IGC, AF, CFCC, HST, ARRS), a proposed double swing gate, and a proposed wallpack LED full cut-off wall mount luminaire. The site is surrounded by existing infrastructure, including a 6' black vinyl coated chain link fence and a 2.5' no disturb zone. The plan is titled "MAP 133, PARCEL 1 N/F HILLTOP PROPERTIES, LLC BK. 43962, PG. 36".

PLAN NO. L-4502

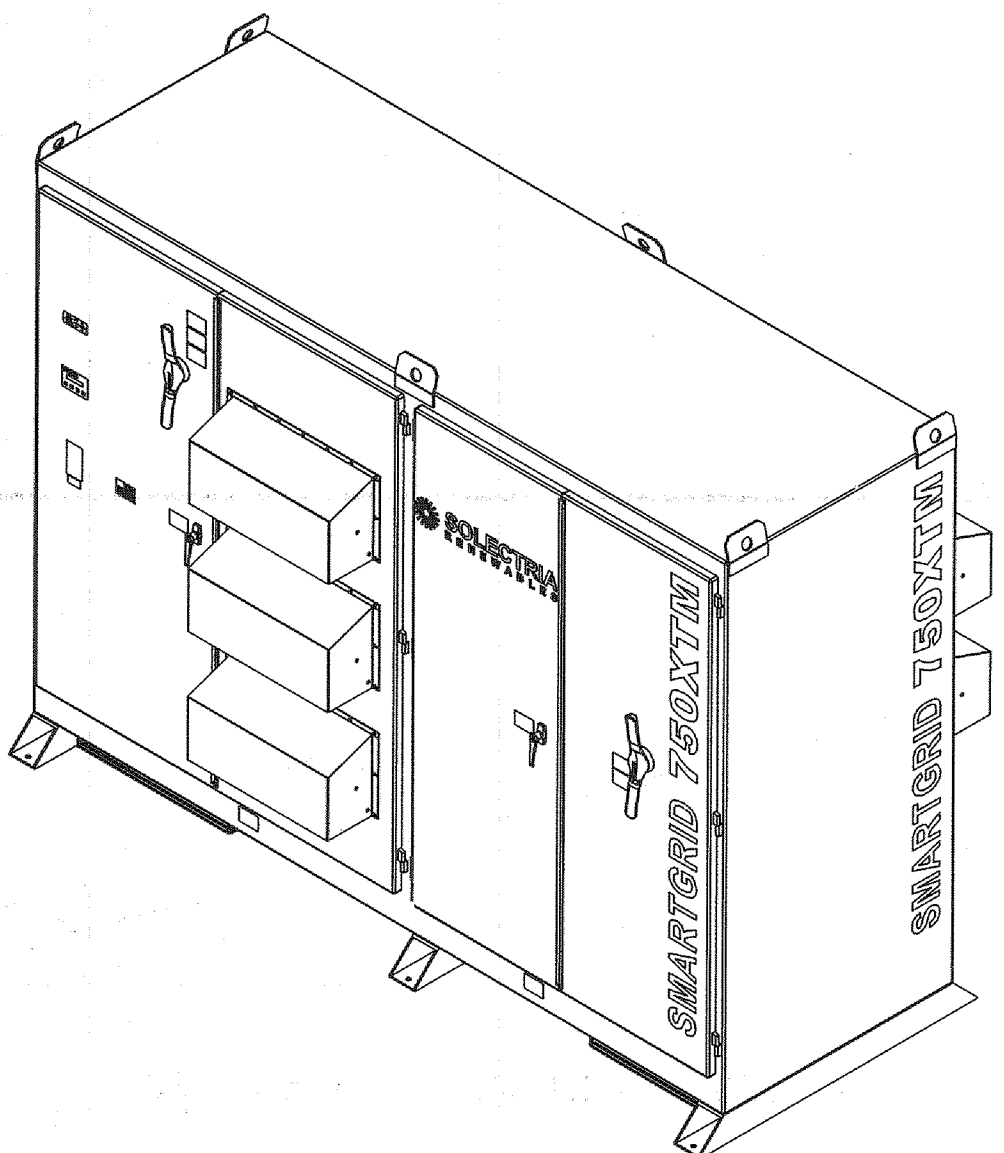


SIDE VIEW, FLUSH MOUNT ON PITCHED ROOF

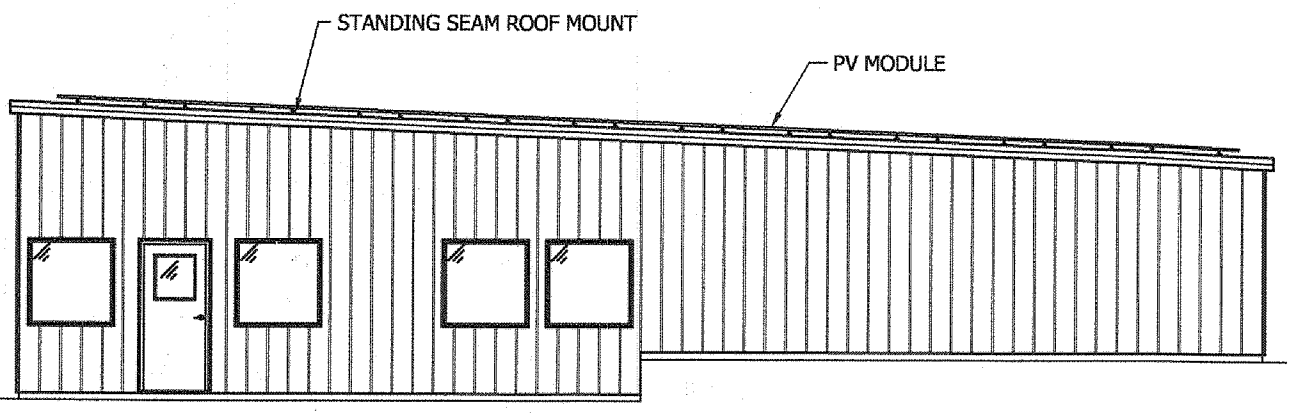


FRONT VIEW, FLUSH MOUNT ON PITCHED ROOF

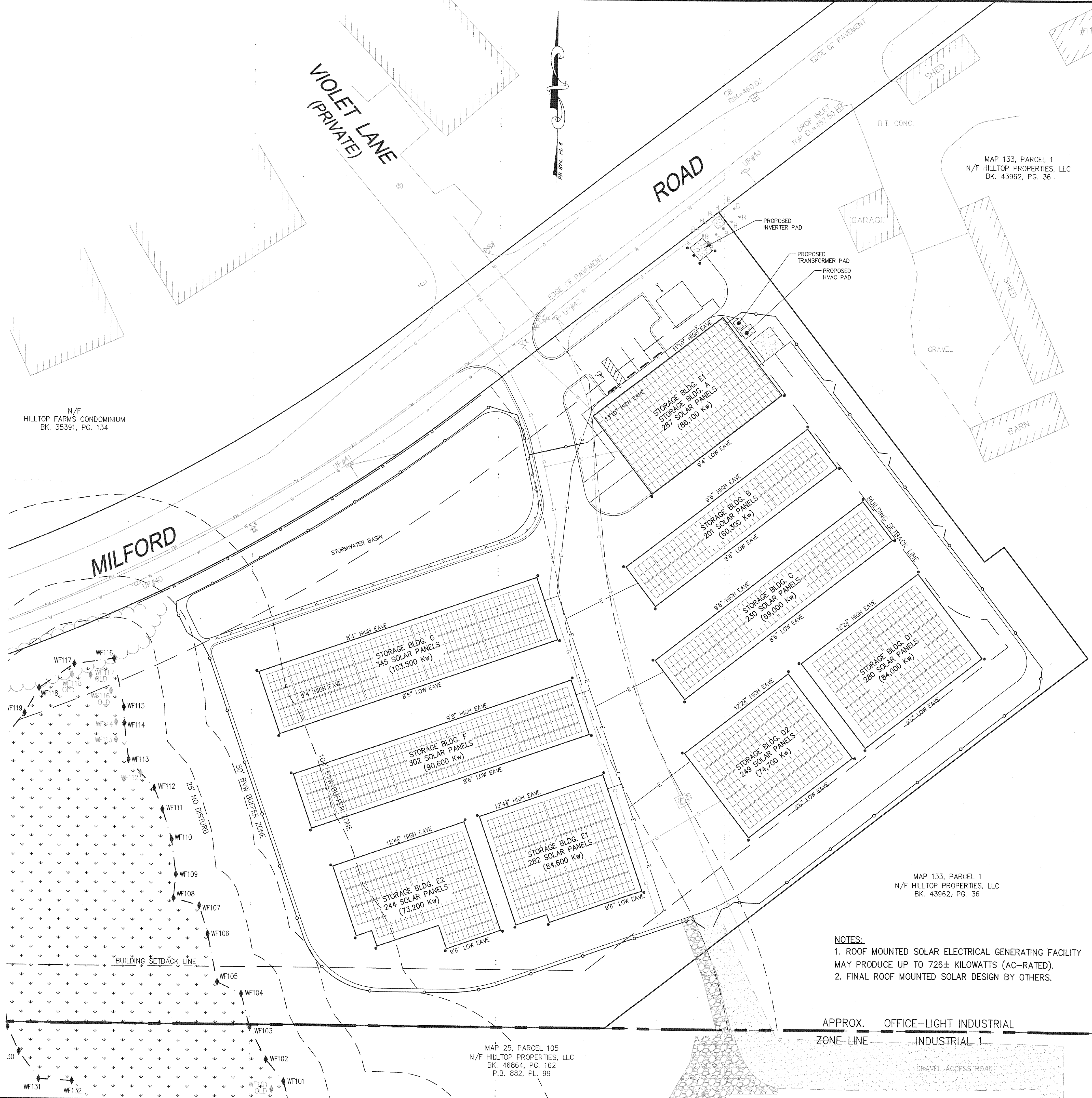
1 TYPICAL ROOF MOUNTING DETAIL
SCALE: N.T.S.



2 TYPICAL INVERTER DETAIL
SCALE: N.T.S.



3 TYPICAL BUILDING ELEVATION DETAIL
SCALE: N.T.S.



NOTES:
1. ROOF MOUNTED SOLAR ELECTRICAL GENERATING FACILITY MAY PRODUCE UP TO 726± KILOWATTS (AC-RATED).
2. FINAL ROOF MOUNTED SOLAR DESIGN BY OTHERS.

APPROX. OFFICE-LIGHT INDUSTRIAL
ZONE-LINE INDUSTRIAL 1



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GRAFTON PLANNING BOARD

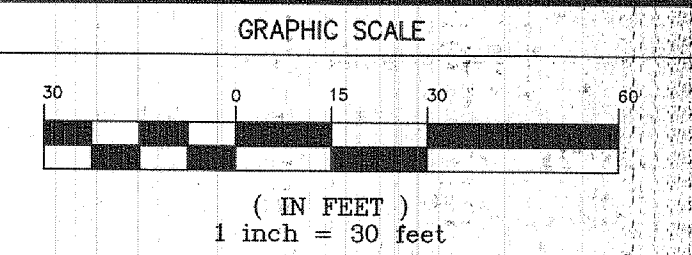
BEING A MAJORITY DATE:

PROJECT: MAP 133, PARCEL 1B
PROPOSED SELF-STORAGE FACILITY
PROPOSED ROOF MOUNTED SOLAR
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

APPLICANT: HILLTOP SELF-STORAGE
OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

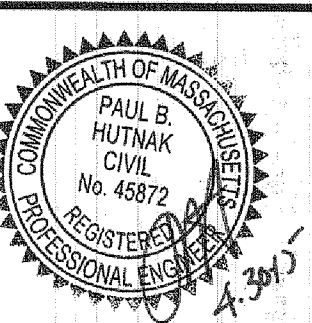
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NO.	DATE	DESCRIPTION
1	4/3/15	PER REVIEW COMMENTS
2	4/28/15	PER PLANNING COMMENTS

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DRAWN BY	TRB
CHECKED BY	PBH
DATE	FEBRUARY 4, 2015
PROJECT NO.	2014-316



SHEET TITLE

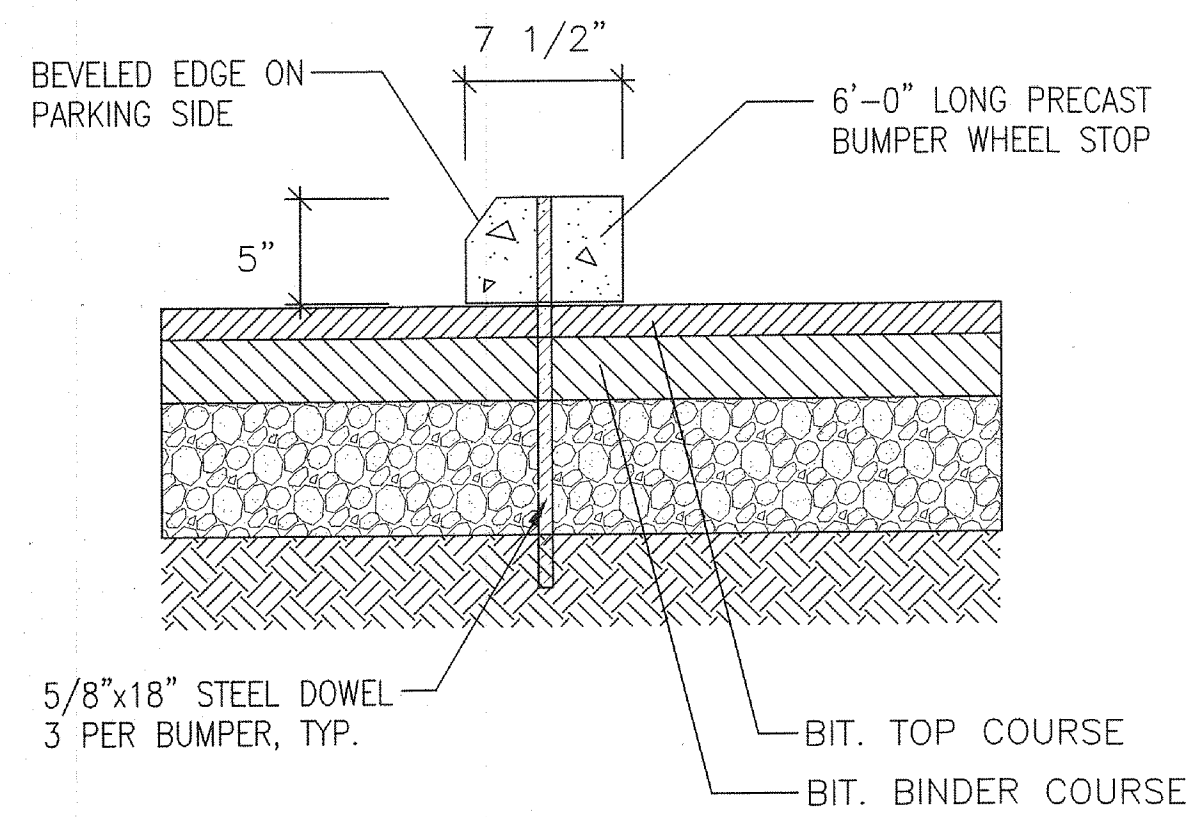
ROOF MOUNTED
SOLAR PLAN



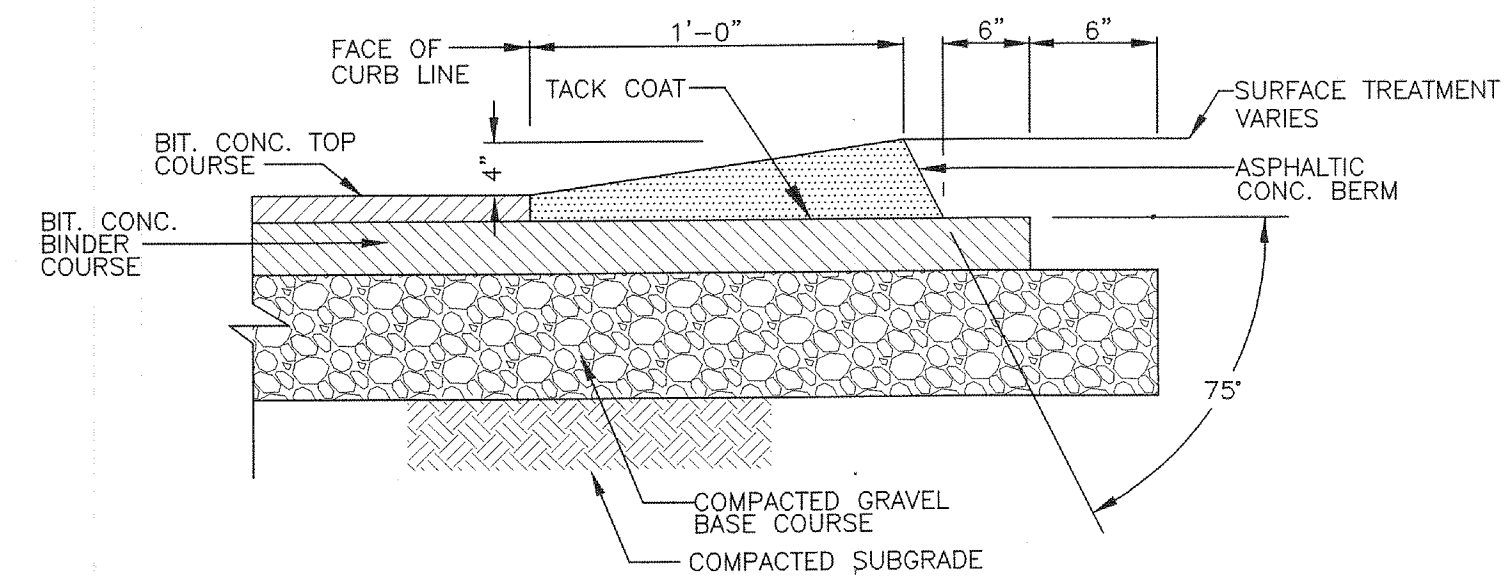
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C-7.0

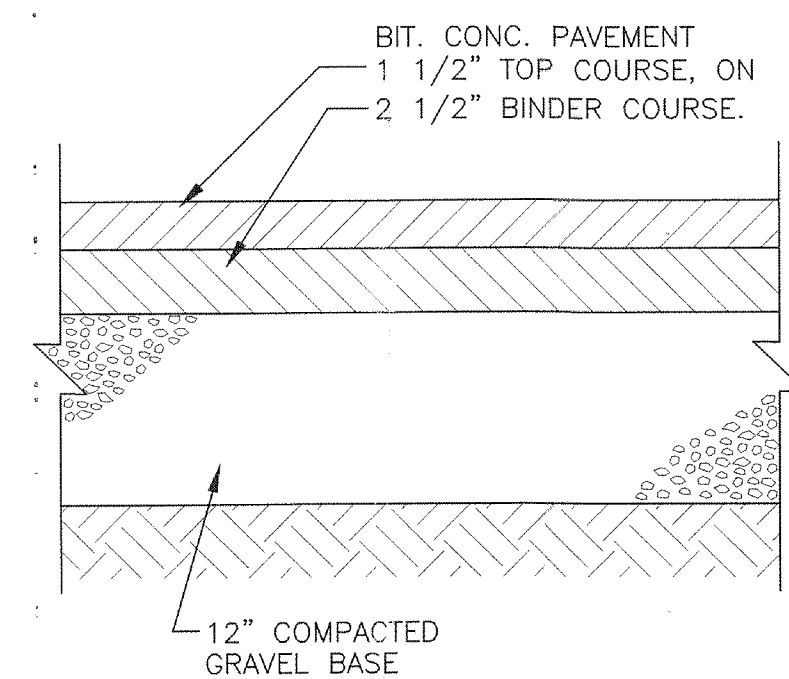
PLAN NO. L-4502



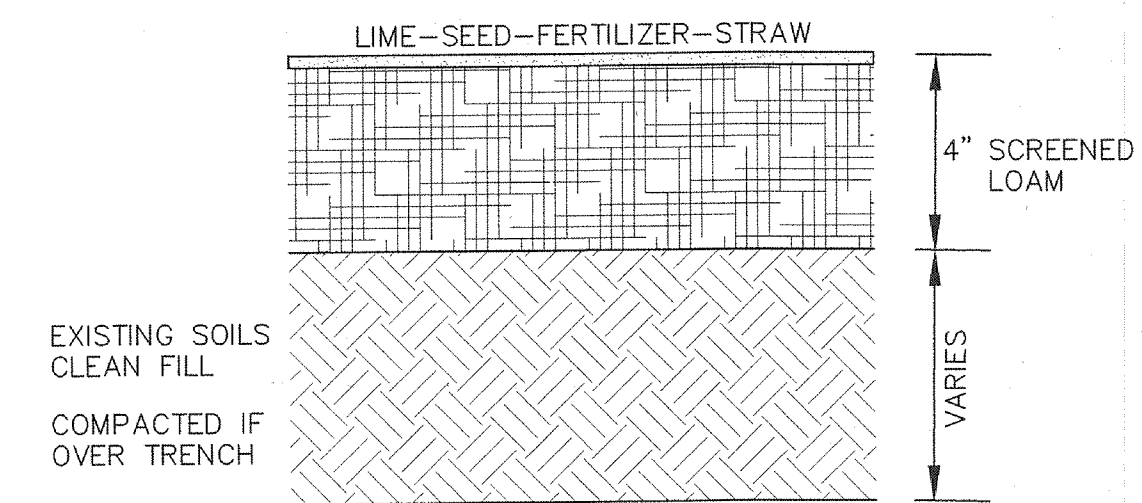
10 PRECAST CONCRETE WHEEL STOP
SCALE: N.T.S.



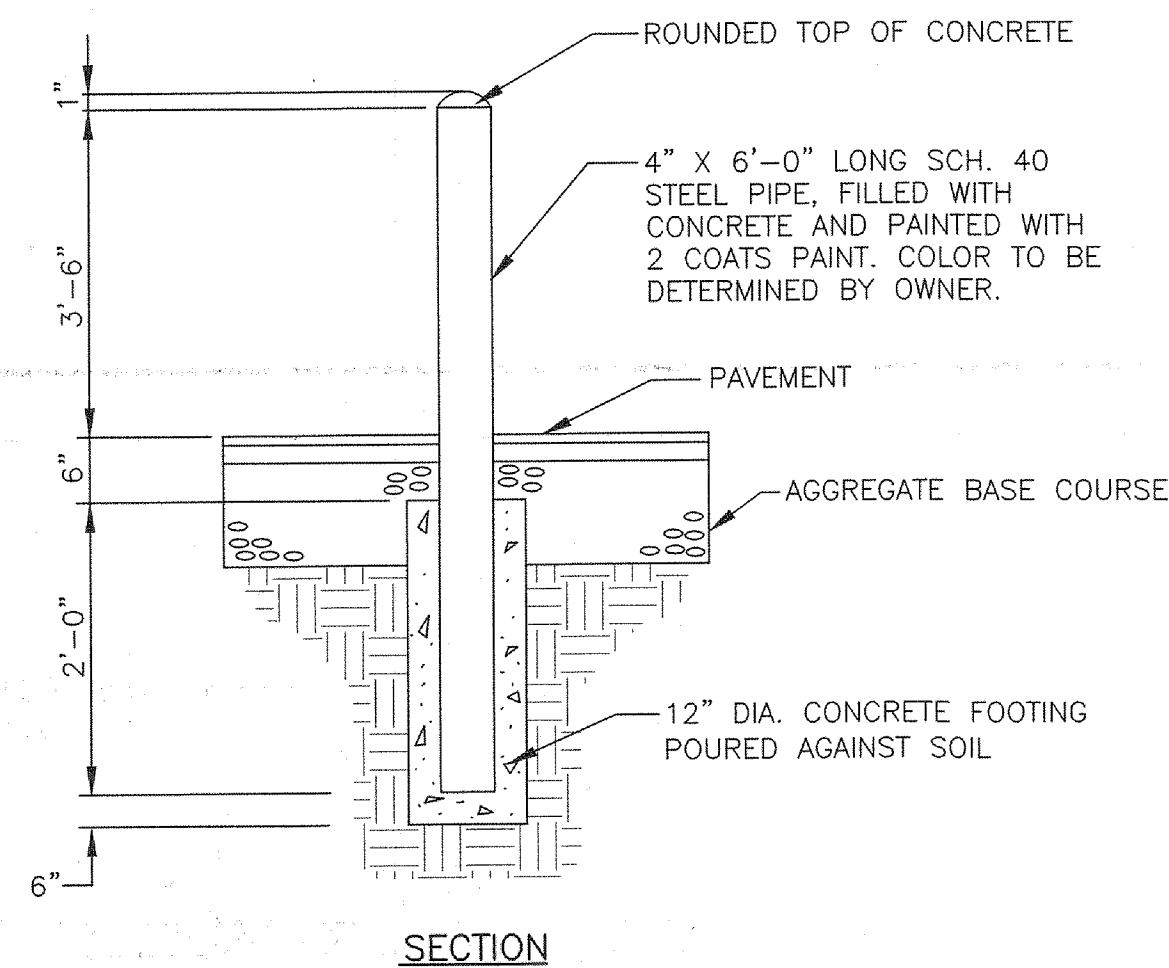
9 MODIFIED ASPHALTIC CAPE COD BERM (CCB)
SCALE: N.T.S.



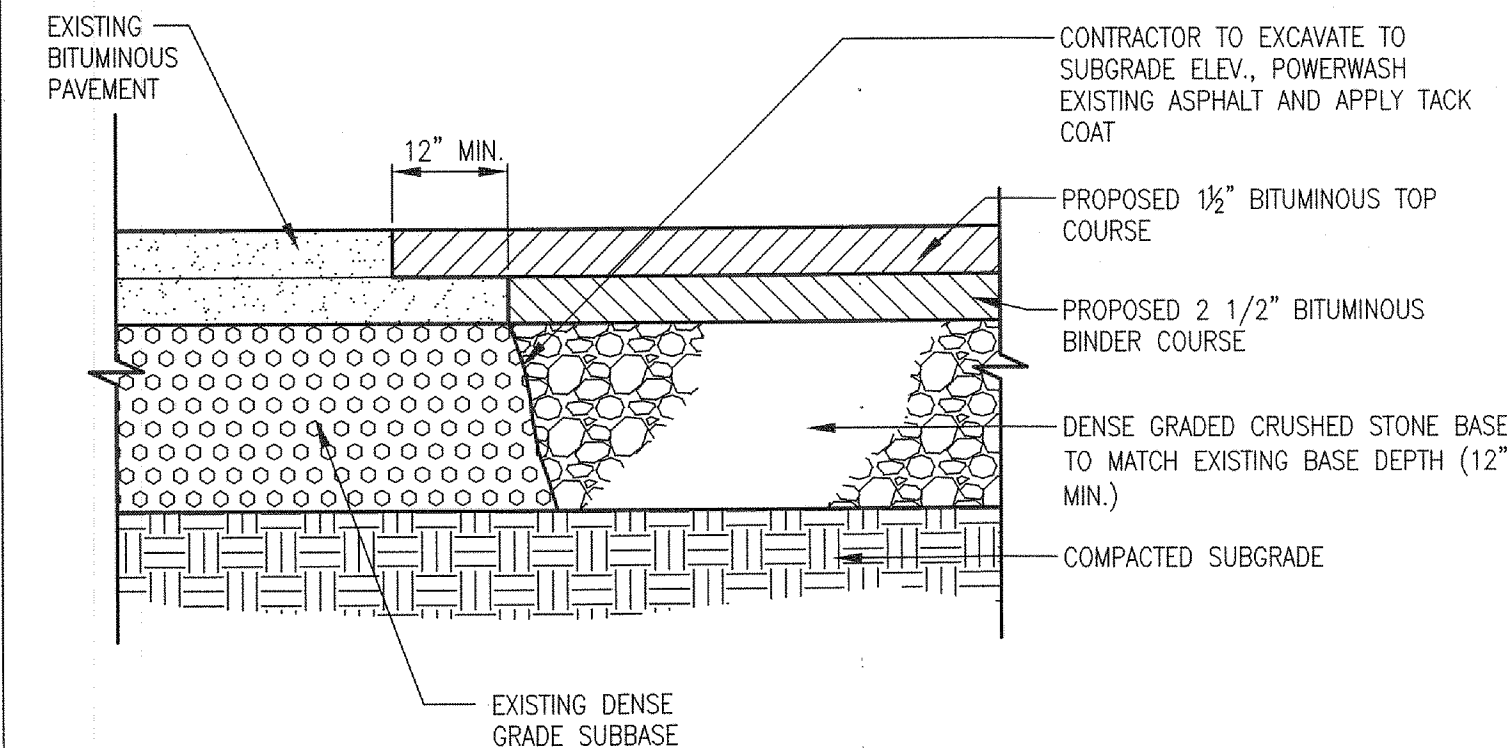
8 BITUMINOUS CONCRETE PAVEMENT DETAIL
SCALE: N.T.S.



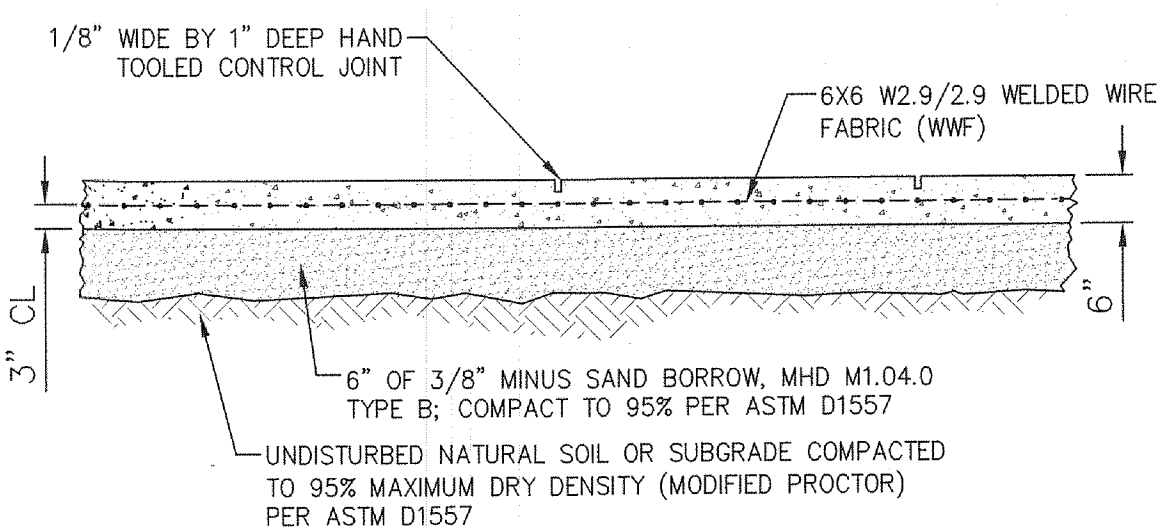
7 LOAM & SEED DETAIL
SCALE: N.T.S.



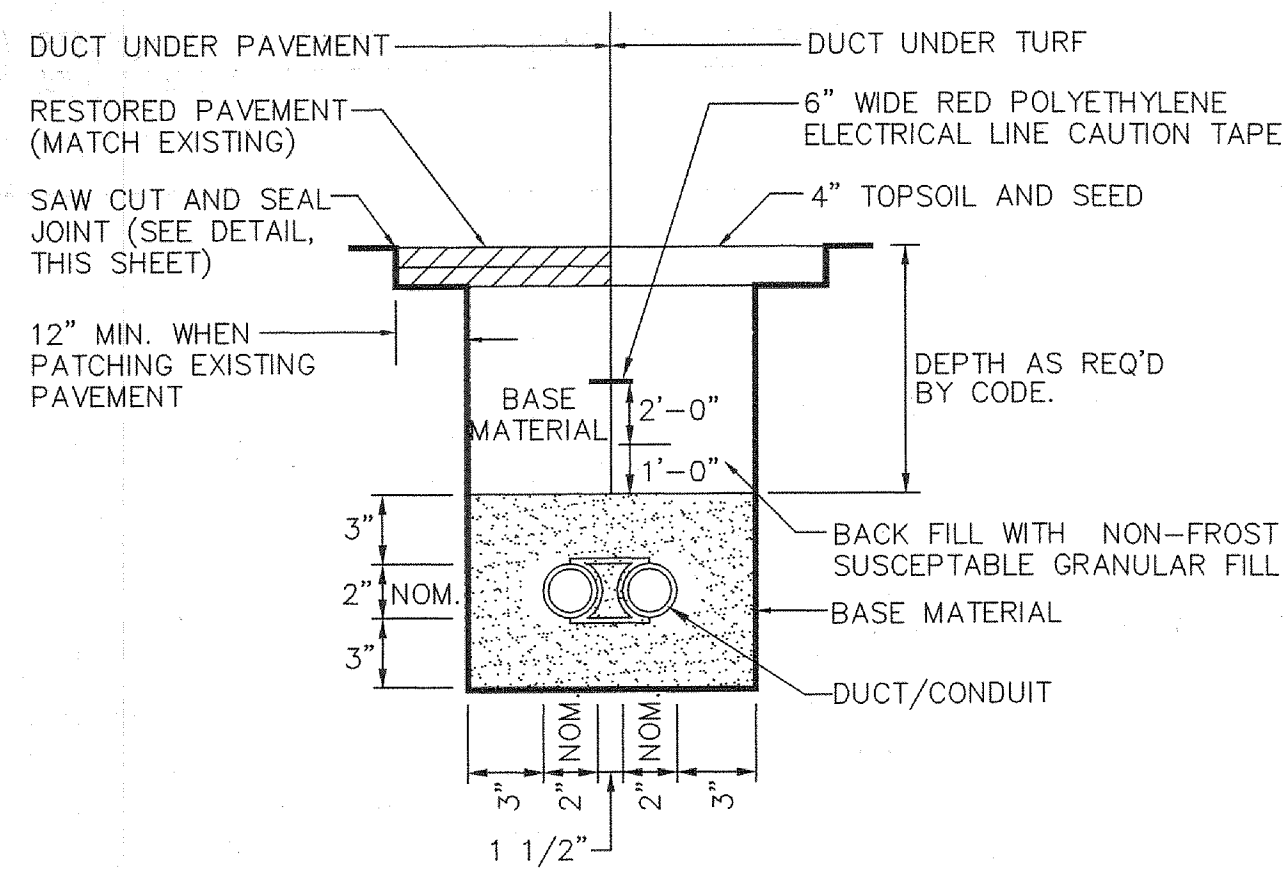
6 BOLLARD (B) DETAIL
SCALE: N.T.S.



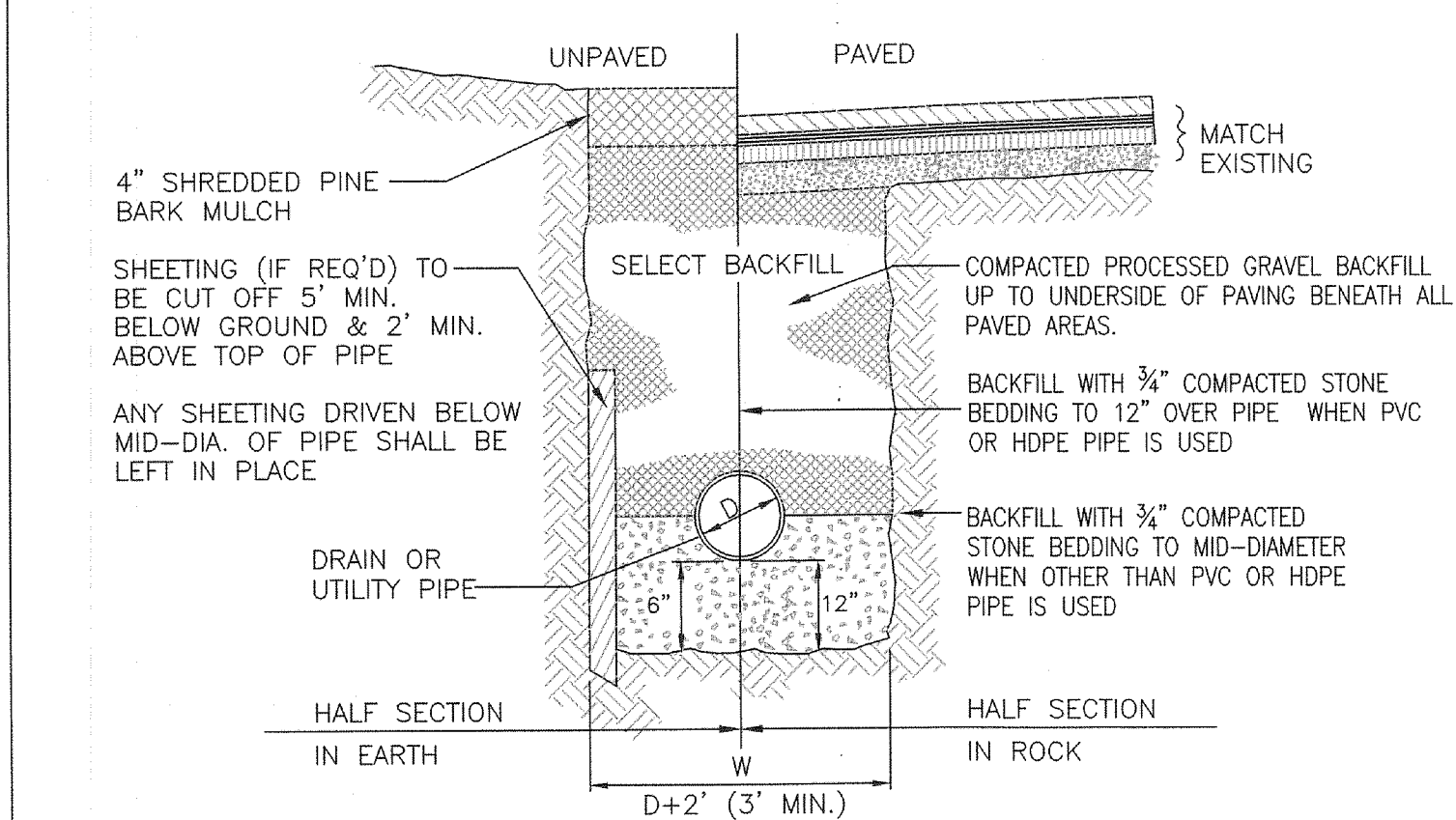
5 PAVEMENT JOINTING DETAIL
SCALE: N.T.S.



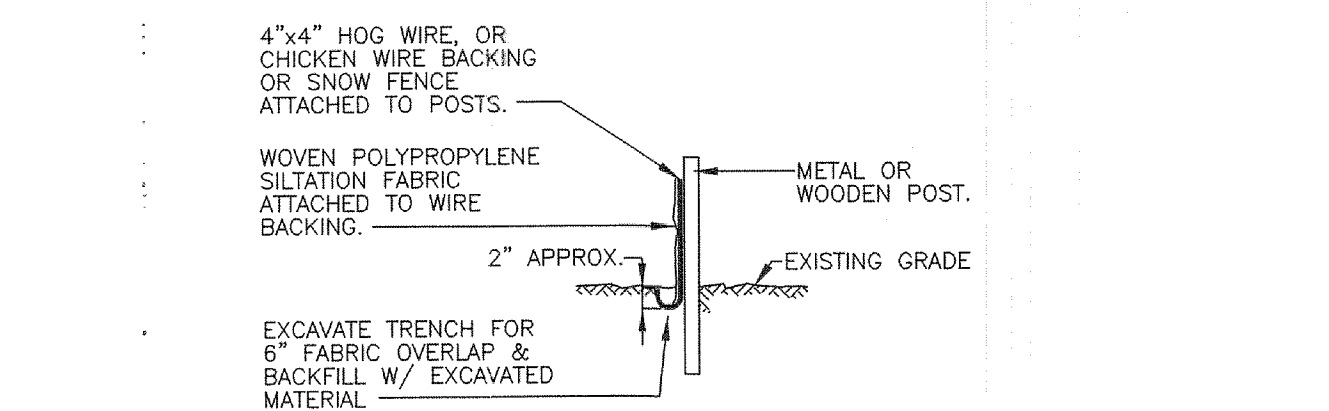
2 CONCRETE SLAB DETAIL
SCALE: N.T.S.



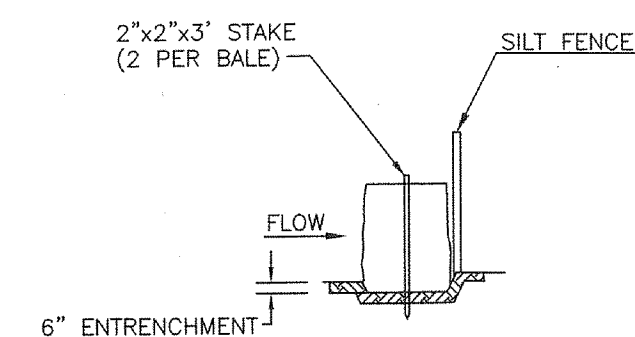
4 UNENCASED DUCT/CONDUIT DETAIL
SCALE: N.T.S.



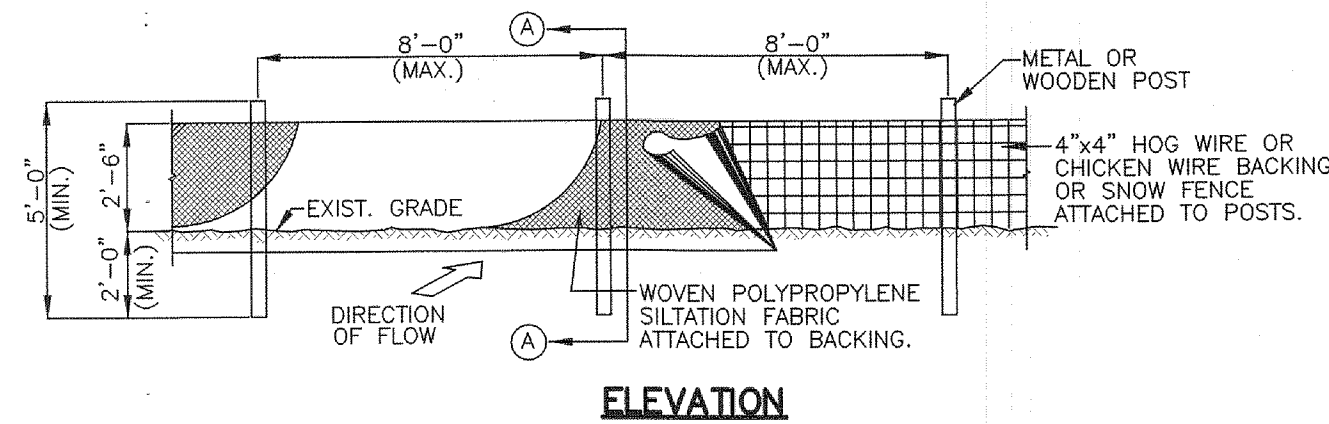
3 TYPICAL UTILITY TRENCH DETAIL
SCALE: N.T.S.



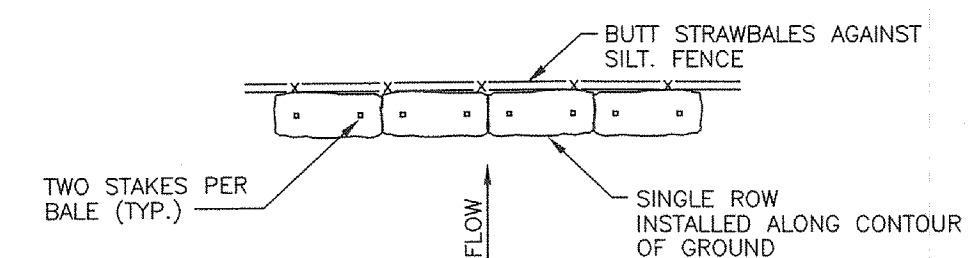
1 EROSION CONTROL BARRIER (ECB)
SCALE: N.T.S.



STRAWBALE SECTION



ELEVATION



PLAN VIEW

STRAWBALES



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APPROVAL UNDER SITE PLAN REVIEW
GRAFTON PLANNING BOARD

BEING A MAJORITY DATE:

PROJECT: MAP 133, PARCEL 1B
PROPOSED SELF-STORAGE FACILITY
PROPOSED ROOF MOUNTED SOLAR
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560
APPLICANT: HILLTOP SELF-STORAGE
OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

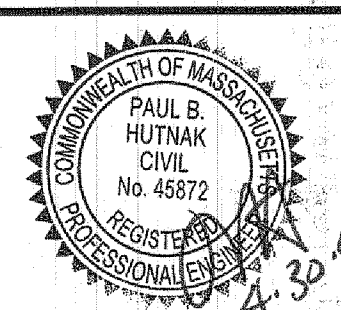
REVISIONS		
NO.	DATE	DESCRIPTION
1	4/3/15	PER REVIEW COMMENTS
2	4/28/15	PER PLANNING COMMENTS

CAD FILE: ...\\dwg\2014-316_SP_R2.dwg
DRAWN BY: TRB
CHECKED BY: PBH
DATE: FEBRUARY 4, 2015
PROJECT NO.: 2014-316

SHEET TITLE

CONSTRUCTION
DETAILS

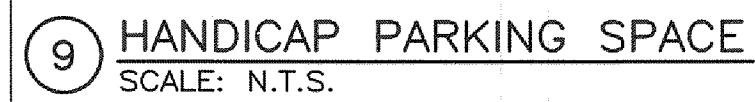
SHEET 1 OF 3



DRAWING NO.

C-8.1

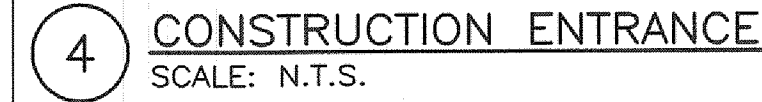
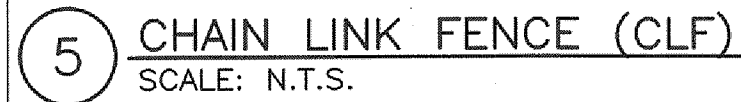
PLAN NO. L-4502



8 TYPICAL BREAKAWAY SIGN POST DETAIL
SCALE: N.T.S.

7 GRASSED "BIOFILTER" SWALE
SCALE: N.T.S.

6 ALUMINUM FENCE DETAIL
SCALE: N.T.S.

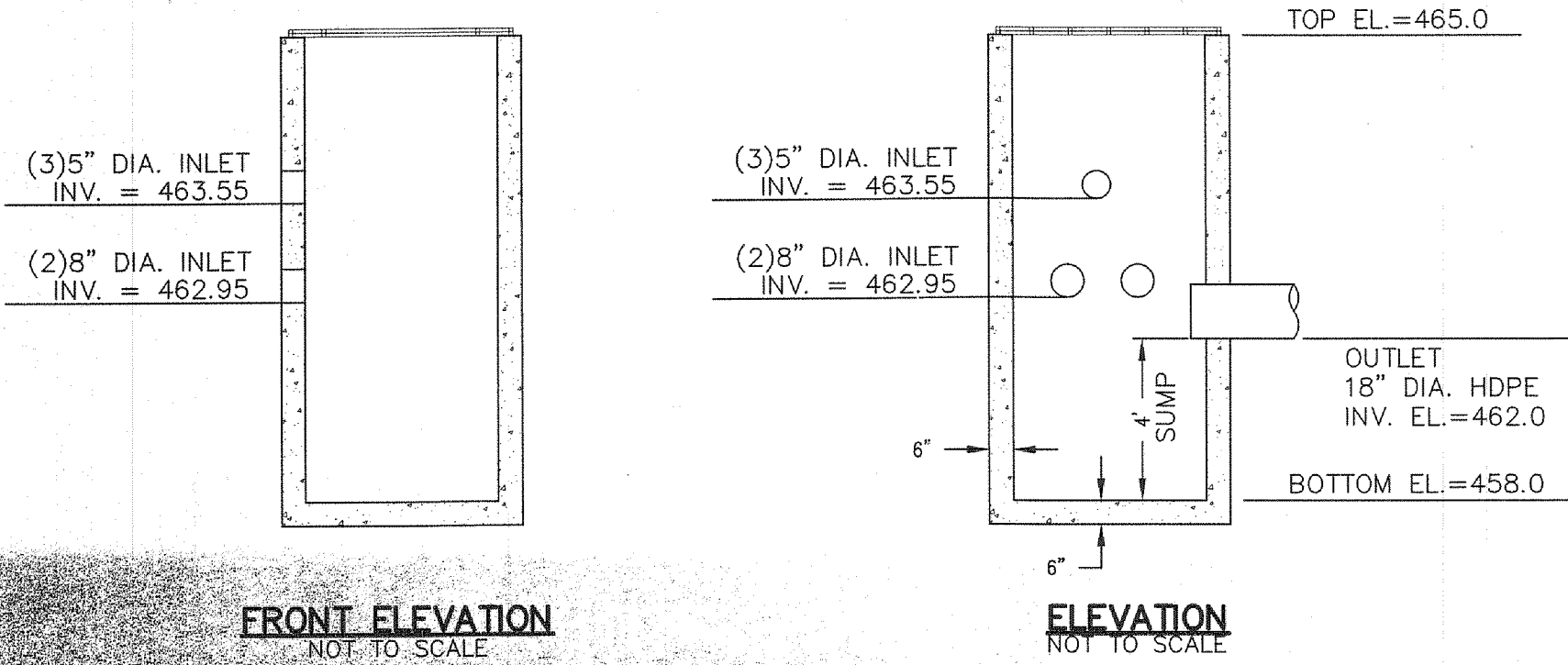
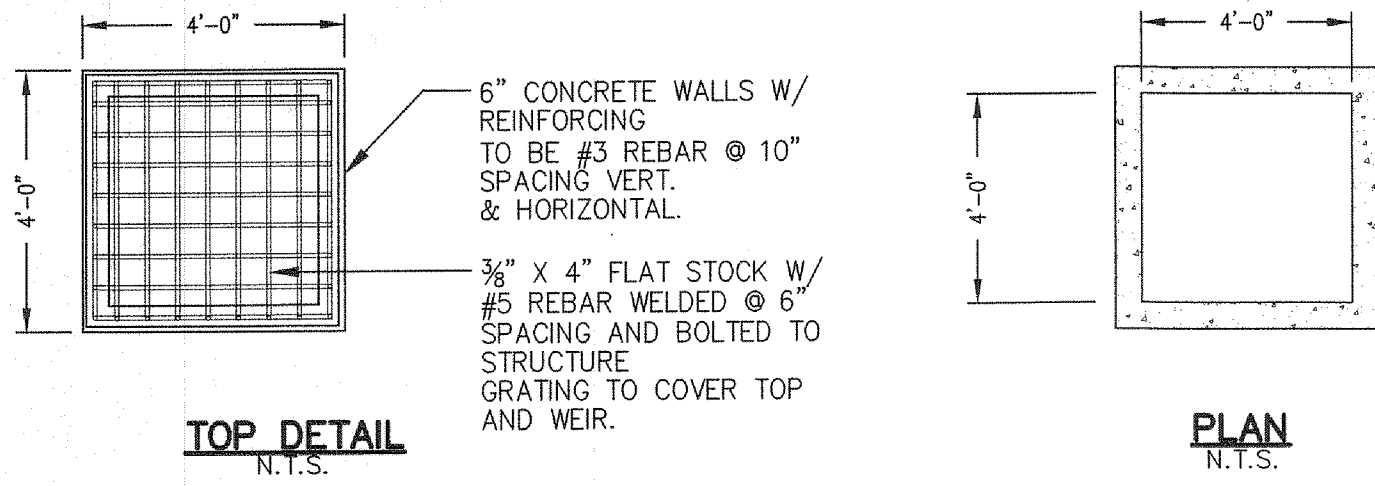


3 PRECAST CONCRETE SINGLE GRATE (CB) CATCH BASIN
& DOUBLE GRATE (DCB) DEEP SUMP CATCH BASIN
SCALE: N.T.S.

2 TYPICAL PRECAST CONCRETE 48" DIAMETER DRAIN
MANHOLE (DMH) FOR PIPE DIAMETERS 24" OR LESS
SCALE: N.T.S.

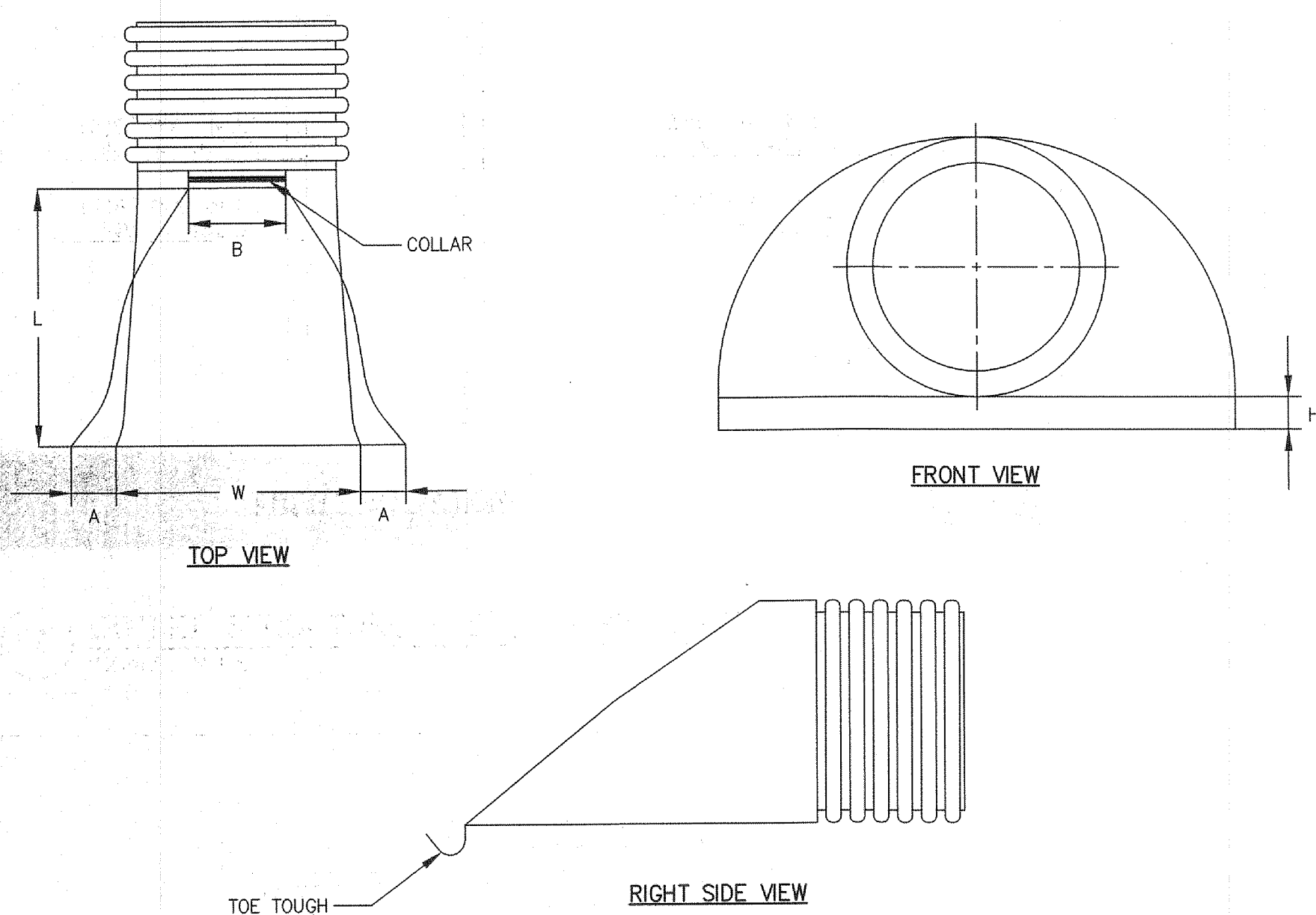


PLAN NO. L-4502

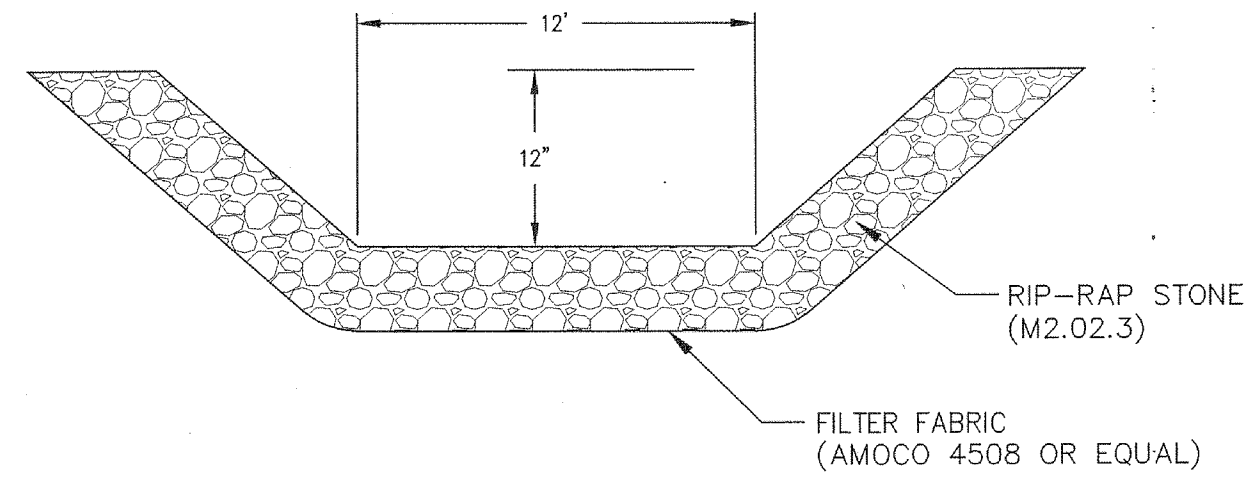


7 OUTLET STRUCTURE (OS) — ORIFICE/GRATE DETAIL
SCALE: N.T.S.

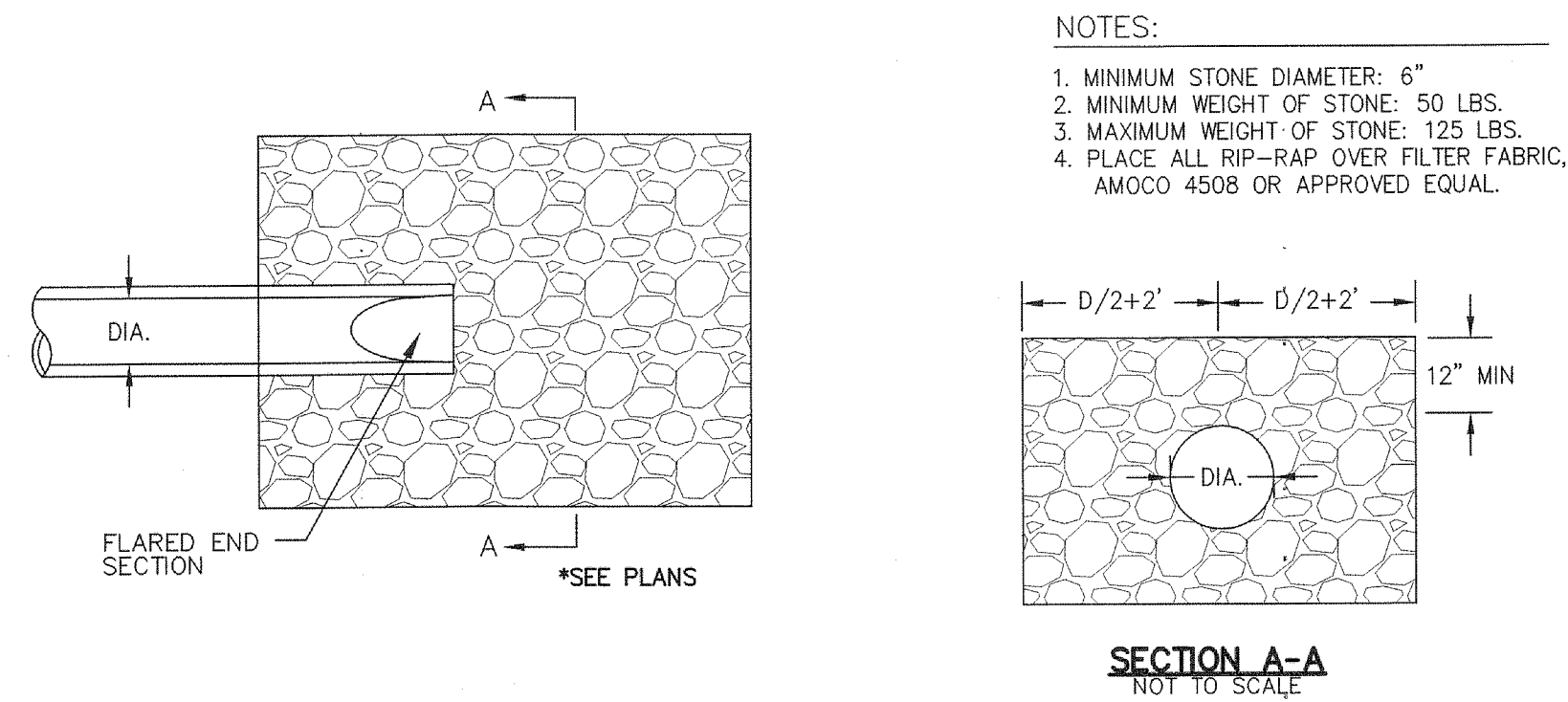
PIPE DIAMETER (INCHES)						
DIAMETER (INCHES)	12	15	18	24	30	36
A (INCHES)	6.5	6.5	7.5	7.5	7.5	7.5
B (MAX) (INCHES)	10.0	10.0	15.0	18.0	22.0	25.0
H (INCHES)	6.5	6.5	6.5	6.5	8.6	8.6
L (INCHES)	25.0	25.0	32.0	36.0	58.0	58.0
W (INCHES)	29.0	29.0	35.0	45.0	63.0	63.0



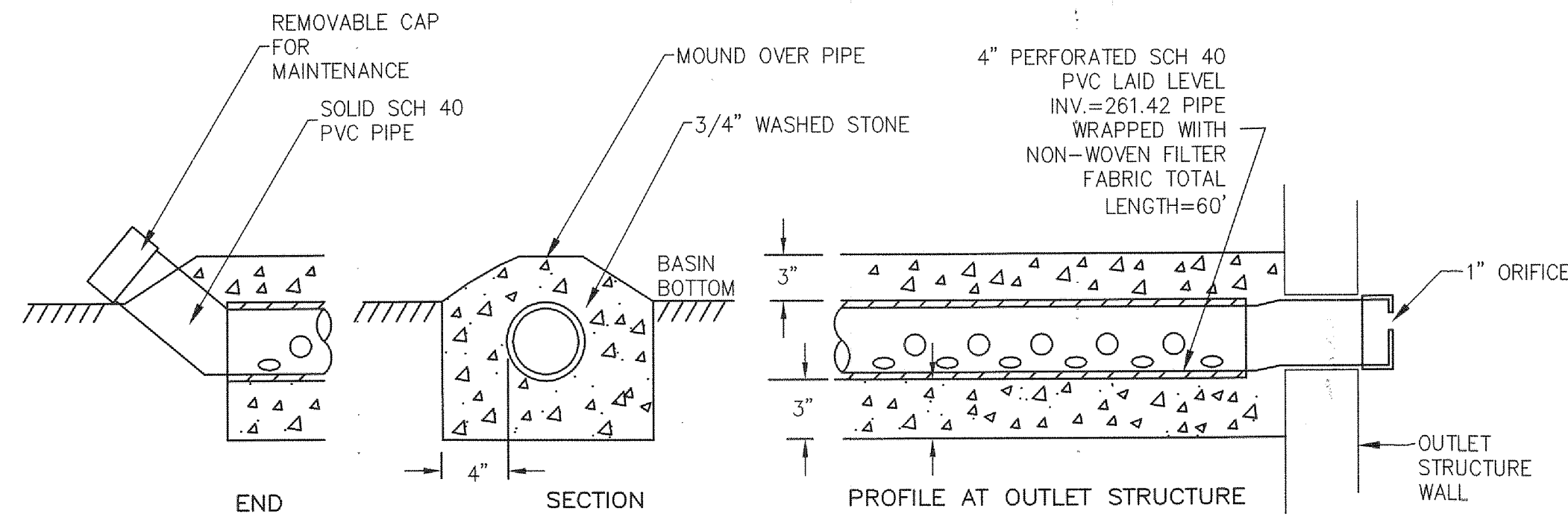
2 CORRUGATED POLYETHYLENE FLARED-END SECTION (FES)
SCALE: N.T.S.



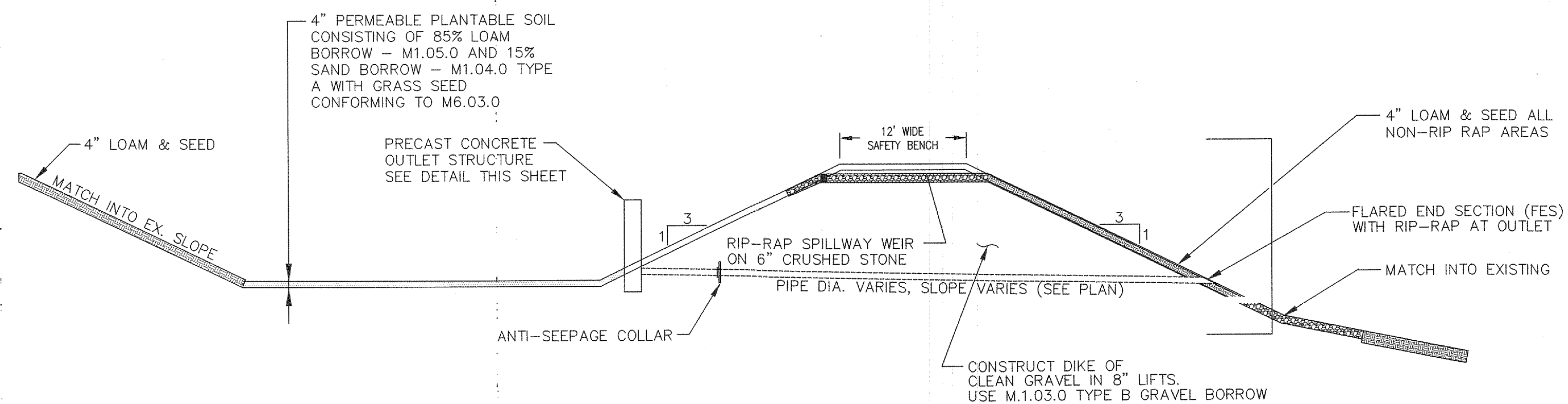
6 STONE RIP-RAP EMERGENCY SPILLWAY
SCALE: N.T.S.



6 STONE RIP-RAP FOR PIPE ENDS
SCALE: N.T.S.

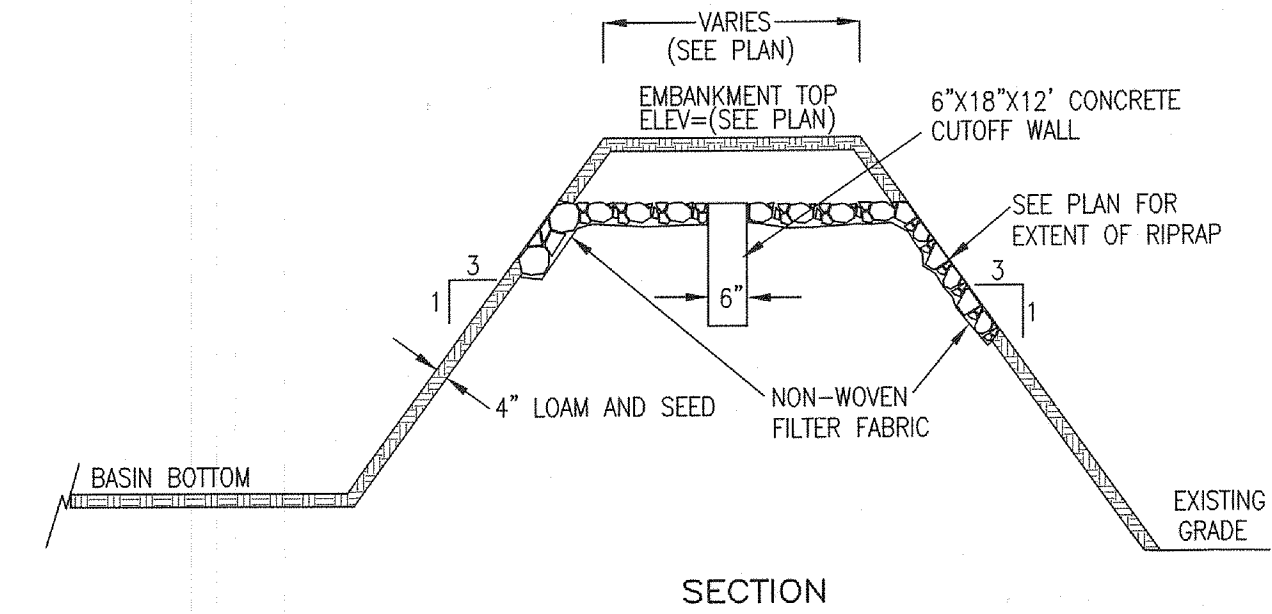


4 WATER QUALITY / DRAW DOWN DEVICE
SCALE: N.T.S.



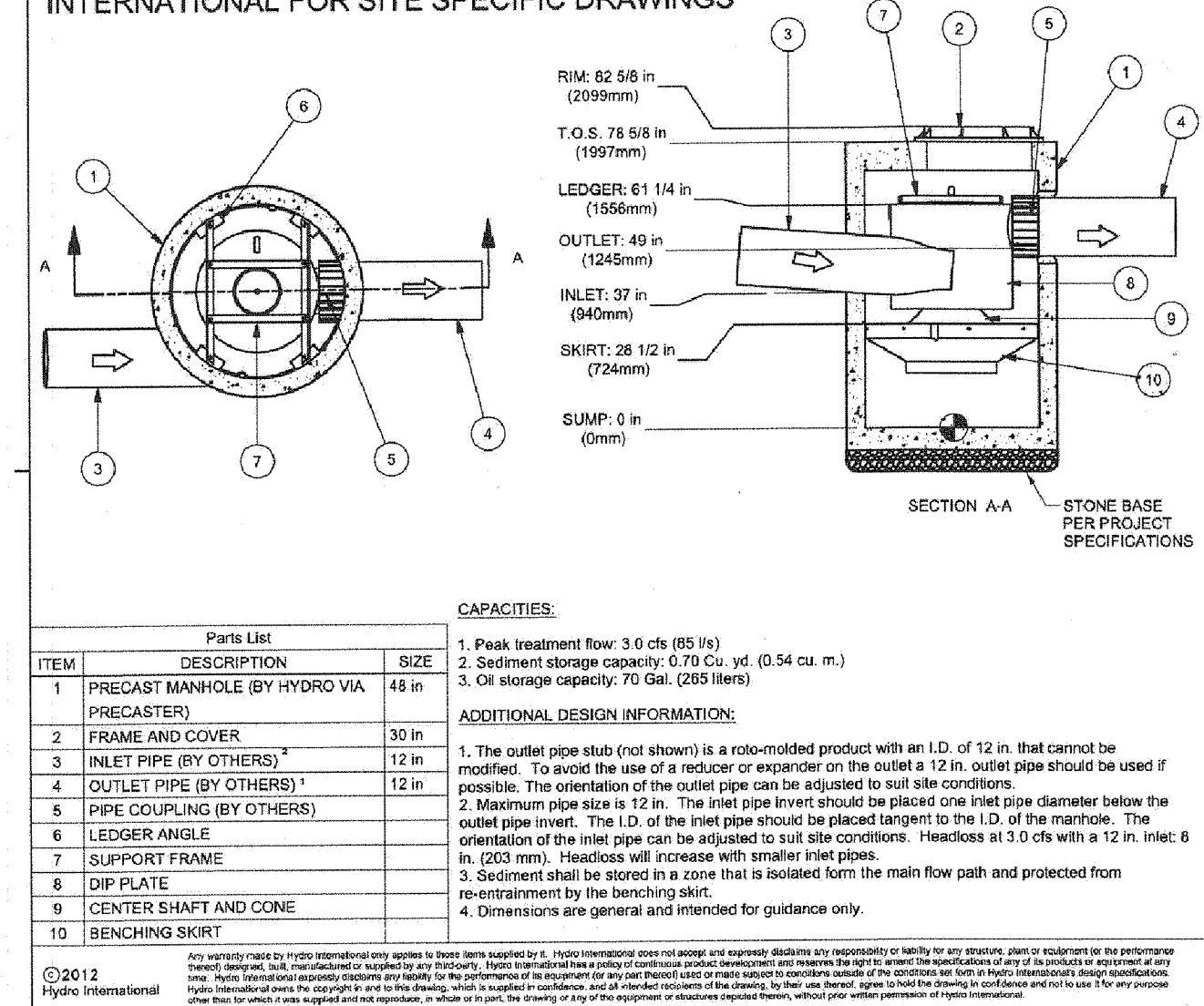
1 STORMWATER BASIN CROSS SECTION
SCALE: N.T.S.

- NOTES:**
- EMBANKMENT TO BE CONSTRUCTED OF CLEAN FILL FREE OF ORGANIC SOILS/MATERIALS WITH NO STONES OVER 12" MAX. DIMENSION. EMBANKMENT TO BE CONSTRUCTED IN COMPACTED LIFTS NOT TO EXCEED 8".
 - BASIN BOTTOM AND SIDE SLOPES (INSIDE AND OUT) TO BE COVERED WITH 4" LOAM AND SEED.
 - RIPRAP SPILLWAY STONE TO BE 4" MINIMUM, 6" MAXIMUM.



5 TYPICAL EMBANKMENT/SPILLWAY
SCALE: N.T.S.

NOT FOR CONSTRUCTION - CONTACT HYDRO INTERNATIONAL FOR SITE SPECIFIC DRAWINGS



3 DOWNSTREAM DEFENDER DETAIL
SCALE: N.T.S.

ASE

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GRAFTON PLANNING BOARD

BEING A MAJORITY DATE:

PROJECT: MAP 133, PARCEL 1B
PROPOSED SELF-STORAGE FACILITY
PROPOSED ROOF MOUNTED SOLAR

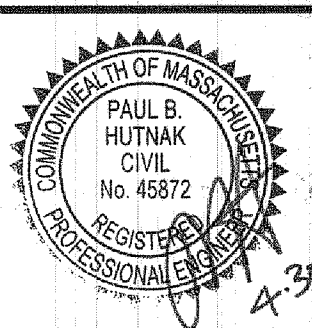
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

APPLICANT: HILLTOP SELF-STORAGE
OF GRAFTON, LLC
100 MILFORD ROAD
SOUTH GRAFTON, MA 01560

REVISIONS		
NO.	DATE	DESCRIPTION
1	4/3/15	PER REVIEW COMMENTS
2	4/28/15	PER PLANNING COMMENTS

CAD FILE: ... \dwg\2014-316_SPLR2.dwg
DRAWN BY: TRB
CHECKED BY: PBH
DATE: FEBRUARY 4, 2015
PROJECT NO.: 2014-316

SHEET TITLE
CONSTRUCTION DETAILS
SHEET 3 OF 3



DRAWING NO.

C-8.3

PLAN NO.: L-4502